Business Review of 1941—page 33

Oil, Paint and Drug Reporter

Founded 1871 by William O. Allison *Member Audit Bureau of Circulations*

THE CHEMICAL MARKET AUTHORITY SINCE 1871

Volume 141
Number 2

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Schnell Publishing Company, Inc.

January 12, 1942

SHARPLES TRADE MARK CHEMICALS

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RECEIVED JAN 13 1942

The bug in the idea is BUGS

Joseph sold the idea of an ever-normal granary to Pharaoh 5000 years ago. It's still a good idea... except for insect infestation of the stored grain!

To safeguard the millions of bushels of corn and wheat now in storage against insect attack requires thousands of gallons of fumigants! One of the effective fumigants contains a mixture of carbon bisulphide and carbon tetrachloride . . . of which Westvaco is an important producer. These chemicals are being made available in cooperation with the Department of Agriculture for the safeguarding of America's food supply.

Fumigants for foodstuffs—barium compounds for tracer bullets—magnesium oxides for refractories—chlorine and its derivatives—alkalis and phosphates—all of the increasing list of Warner Chemicals are playing an ever-increasing part in both defense and industrial production.

WARNER CHEMICAL COMPANY

Division of WESTVACO CHLORINE PRODUCTS CORPORATION

CHRYSLER BUILDING, NEW YORK, N. Y.

Oil, Paint and Drug Reporter

Founded 1871 by William O. Allison
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Methanol Prohibited For Antifreeze Use

OPD Washington Bureau
January 7, 1942

Use of methanol as or in an antifreeze agent is prohibited by a second amendment to general preference order M-31 announced today by OPM Division of Priorities. The amendment is effective from December 31, 1941, and applies to all stocks on hand January 1.

Use of methanol as a denaturant or solvent is given a priorities rating of B-8 under certain conditions. Provision is made for appeals by persons affected by the new order.

The text of the amendment follows:—

(a) Section 971.1 (general preference order No. M-31 as amended) is hereby further amended in the following particulars:—

(1) Present subparagraph (d) (4) is hereby amended to read as follows:—

"(d) (4) Deliveries of methyl alcohol to persons who require the same for general denaturant and solvent uses, and who, prior to delivery thereof, shall have certified to the producer or the distributor (a) that the methyl alcohol sought will be used (sold, in the case of a distributor) for such purposes only, and (b) that the quantities sought, in any month, together with all quantities

—*Continued on page* 101

Distillers Must Use Grain for Alcohol

OPD Washington Bureau
January 8, 1942

Approximately 60 percent of the nation's distillery capacity was ordered by Donald M. Nelson, Director of Priorities, today to begin production of 190-proof grain alcohol starting January 15. The order was the third of a series of three priority orders issued in an attempt to conserve molasses for sugar production.

Today's order, M-69, provided that all distilleries which have the facilities to manufacture 190-proof ethyl alcohol from corn or grain, shall, starting January 15, use them only in the production of that type of alcohol. Approximately 60 percent of the distilling industry's capacity is subject to the order, Mr. Nelson said.

Pointing out that 190-proof ethyl alcohol is essential for industrial and war purposes, the order gives Mr. Nelson the authority to allocate the entire production of 190-proof alcohol to essential uses. To the extent that

—*Continued on page* 115

Price Ceiling Changed On Used Steel Drums

OPD Washington Bureau
January 9, 1942

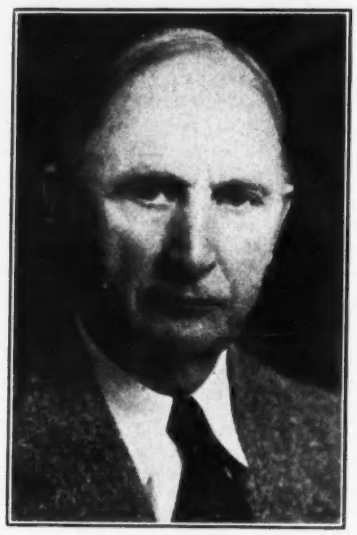
Modification of the price schedule covering used steel barrels or drums to assure dealers and peddlers an adequate operating margin was announced today by Price Administrator Leon Henderson.

The effect of the change is to establish a ceiling price of $1.25 each for "raw" used 18-gauge steel barrels or drums with a capacity of 50 to 55 gallons when sold by the emptier to "any person." Formerly the schedule imposed this ceiling price only when such drums were sold direct to users. This left sales by emptiers to others than users free of any restriction.

Prices of used drums other than the standard 52 to 55 gallons, 18-gauge size were ceiled at the lower of the prices quoted by the Rheem Manufacturing Company and the Wheeling Corrugating Company as of October 1, 1941.

Dr. Ittner Receives Perkin Medal

The Perkin Medal for 1942 was presented last evening to Dr. Martin H. Ittner of the Colgate-Palmolive-Peet Company at a joint meeting of the



Dr. Martin H. Ittner

American Section of the Society of Chemical Industry, the American Chemical Society, the American Institute of Chemical Engineers, the Elec-

—*Continued on page* 101

Ethyl, Butyl, Isopropyl Alcohols Restricted in Production

OPD Washington Bureau *January 7, 1942*

New restrictions are laid variously on production, distribution, and use of ethyl, butyl, and isopropyl alcohols by further amendment of OPM general preference order M-30, issued December 31, 1941, but not announced by the Division of Priorities until today.

The order reduces the allowable supply of ethyl alcohol for the manufacture of a number of toiletries. It takes precedence over priorities regulation No. 1 where it differs therefrom. It limits all monthly deliveries and use to 100 percent of the corresponding receipts or consumption in the 1940-41 fiscal year, except by special permission of the Director of Priorities and for specified purposes for which producers are authorized to ship in unlimited quantities, in accordance with priorities regulation No. 1.

Production of ethyl and butyl alcohols from molasses is conditioned to the exhaustion of facilities to produce them from grain.

Deliveries of isopropyl alcohol are assigned B-1 to B-7 preference ratings for four groups of specified uses, and other deliveries are subjected to the restrictions comparably applied to ethyl alcohol.

Details of Restrictions

The restrictive text of the new amendment is as follows:—

(c) Restrictions on deliveries of ethyl alcohol. Anything in priorities regulations No. 1 to the contrary notwithstanding:—

(1) Unless otherwise directed by the Director of Priorities, no producer shall, during any calendar month commencing with the month of January, 1942, use or deliver ethyl alcohol for any purpose not specified in subparagraphs (c) (2), and (3) hereof, in excess of 100 percent of the quantity of ethyl alcohol which he used or delivered, respectively, for such purpose during the corresponding month in the twelve months' period ended June 30, 1941.

(2) Unless otherwise directed by the Director of Priorities, no producer shall, during any calendar month commencing with the month of January, 1942, use or deliver ethyl alcohol for a purpose set forth below in excess of that percentage, set opposite such purpose, of the quantity of ethyl alcohol which he used or delivered, respectively, for such purpose during the corresponding month in the twelve months' period ended June 30, 1941:—

Purpose.	Percentage.
Hair and scalp preparations	85% during month of January, 1942; 70% during each month thereafter.
Bay rum	
Shampoos	
Face and hand lotions	
Body deodorants	
Toilet waters	
Perfume and perfume tinctures	
Toilet soaps (including shaving cream)	
Mouth washes	
Tooth cleaning preparations	
Perfume materials and fixatives	
Rubbing alcohol	
Witch hazel	
Deodorant sprays (non-body)	
Vinegar	
Candy glazes	

(3) Producers may, subject to priorities regulation No. 1, make deliveries of ethyl alcohol for the purposes set forth below without limitation:—

Military explosives.
Acetic acid (except vinegar for food use).
Ethyl acetate.
Ethyl chloride.

—*Continued on page* 125

Plastics Meeting Set for January 14

Collaboration on developing further plastics uses in aircraft is the purpose of the meeting January 14 of technicians of the Society of the Plastics Industry with the United States Army Air Corps and the Bureau of Aeronautics. Among other things the meeting at Dayton, Ohio, will subject plastics pieces taken from bombed German planes to examination.

U.S.P. Convention By-Laws and Constitution Revision Offered

A draft of a revised constitution and by-laws for the United States Pharmacopeial Convention has been submitted by the committee created for that purpose at the original session of the 1940 convention in May, 1940. It will be discussed for approval at a recessed session of the convention to be held April 7 in Cleveland, Ohio. It is the outcome of conferences held in October, 1940, and May, August, and November, last year.

The special committee on constitution and by-laws was created in accordance with a resolution adopted by the 1940 convention with a purpose of simplifying the composition of pharmacopeial conventions, more carefully supervising representation therein, and improving the processes and results of revision. It was also designed to provide a pharmacopeial headquarters and five-year revisions of the text.

The committee consists of Dr. A. H. Bunce, chairman, Atlanta; P. H. Costello, Cooperstown, N. D.; Carson P. Frailey, Washington; Dr. W. A. Groat, Syracuse, N. Y.; Theodore G. Klumpp, New York; C. H. Rogers, Minneapolis; W. F. Rudd, Richmond, Va.; Dr. T. Sollman, Cleveland; Dr. H. C. Wood, jr., Philadelphia. Ex-officio members are Dr. Cary Eggleston, New York, chairman of the U.S.P. convention; L. E. Warren, Chevy Chase, Md., secretary of the convention; and E. F. Cook, chairman of the U.S.P. revision committee.

In its deliberations the committee had the assistance of Dr. James H. Beal, former chairman of the U.S.P. board of trustees; Dr. W. A. Bastedo, former president of the convention; and Dr. Morris Fishbein, E. F. Kelly, Ernest Little, and Robert L. Swain, of the board.

Summary of Changes

The committee has issued the following summary along with copies of the draft of the proposed constitution and by-laws:—

Constitution

Article I. A definition of the pharmacopeia is included.

Article II. The list of institutions to be represented is revised in order to prevent duplication and each is limited to one delegate in order to reduce the size of the convention and to carry out the evident purpose of the convention in limiting each delegation to one vote. Institutions other than those specifically named are required to be approved by an accrediting agency or to be affiliated with their national organization. Membership in previous conventions has been limited to those delegates who were present at the decennial meeting. In view of the probability of more frequent meetings it was thought advisable to somewhat liberalize this limitation on membership.

Delegates are required to be directly connected with the institution which they represent.

Article III. The number of vice-presidents is reduced to one. The officers of the convention are nominated from the floor and elected by delegates. The office of assistant-secretary is omitted.

Article V. The time of the decennial meeting is changed from May to April as a more convenient time.

The business of special meetings is limited to the purposes mentioned in the call for the meeting.

Article VI. A quorum of fifty is provided for as compared with the 25 in the present By-Laws.

Article VII. Additional amendments submitted at the first session of a decennial or special meeting after being reported upon by the board of trustees are required to receive the affirmative votes of not less than seven-eighths of the members present and voting, for adoption.

—*Continued on page* 122

Selenium, Tellurium Industrial Uses Studied

Industrial scientists are drafting hitherto "useless" metals to bolster production in the rubber, oil, machine tool, and many other vital defense industries, Dr. G. R. Waitkins and Dr. R. Shutt of the Battelle Memorial Institute, Columbus, Ohio, declare in a report to the American Chemical Society.

Research indicates important commercial possibilities for selenium and tellurium, two metals for which there has been only a small demand in the past, according to Dr. Waitkins and Dr. Shutt, who have been engaged for three years in the development of new chemical uses for the metals, which resemble sulphur.

OPD Price Index

The OIL, PAINT AND DRUG REPORTER'S relative record of prices for chemicals, oils, and drugs is currently as follows:—

Jan. 9, 1942	Jan. 2, 1941	Jan. 10, 1941
142.1	**142.0**	**107.1**

Oils, fats, and waxes are noticeably higher than in the previous week; acids are up a little; drugs and fine chemicals are down a bit. All other groups are unchanged.

The base of the OPD Price Index is the average of prices in 1926 and 1936, those years representing extremes of price undulations in the interwar period.

Closing Markets

London Closing Cable

LONDON, Jan. 9, 1941

Glycerin, B.P., prices advanced 5s. to 72s. 6d. per hundredweight.

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Peppermint Oil Breaks

Spot prices on peppermint oil broke to $6.50 per pound for natural and $6.75 for redistilled at the close of last week. Probable weakness and price decline had been forecast in primary market advices. A price ceiling will be discussed January 13 by the OPA and the peppermint oil producers.

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Orthophenetidin Advanced

One producer advanced prices 2c. for paraphenetidin and orthophenetidin to the basis of 82c. per pound.

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Acetanilide Higher

Prices on acetanilide were advanced Friday to a minimum of 34c. per pound by one prominent manufacturer. Chloral hydrate was up to 92c. per pound. Some glycerophosphates were in the process of revision.

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Bunker Oil Price Increase Blocked

OPD Washington Bureau
January 9, 1942

Applications filed by certain large oil companies for permission to increase prices of grade C bunker fuel oil at East coast and Gulf coast locations have been denied, it was announced today by Price Administrator Leon Henderson.

Several oil companies had proposed to raise bunker C fuel oil prices 15 cents a barrel to $1.50 in New York harbor, with corresponding advances at other points on the Eastern seaboard. In addition, an advance was proposed in the Gulf coast price.

In arriving at its decision, Mr. Henderson said, OPA considered all pertinent factors, including current charter rates; actual costs of operating company-owned tankers in which a substantial part of heavy fuel oil is moved; the fuel supply position; the defense operations in which fuel oil is required; and the general economic position of refiners and marketers on the Gulf and East coasts.

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Pfizer Moves Purchasing Department to Brooklyn

The purchasing department of Charles Pfizer & Co., manufacturing chemist, this city, is now located at the company's factory, 11 Bartlett street, Brooklyn, N. Y. The telephone is: EVergreen 8-2510-1-2-3-4.

All invoices should be rendered in duplicate and sent to the works' address.

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Bids Wanted

Acetone:—100,000 pounds; Commanding Officer, Picatinny Arsenal, N. J.; procurement 1447, opening January 12.

Acid, Acetic:—2,400 pounds; Chemical Warfare Service, Huntsville Arsenal, Ala.; procurement 5, opening January 19.

Acid, Nitric:—4,800 pounds, Chemical Warfare Service, Huntsville Arsenal, Ala.; procurement 5, opening January 19.

Ammonium Sulphate: — 1,000 pounds; Commanding Officer, Picatinny Arsenal, N. J.; procurement 1442, opening January 13.

Barium Nitrate:—175,000 pounds; Navy Purchasing Office, 90 Church Street, New York, N. Y.; schedule 4243, opening January 12.

—*Continued on page* 120

Contents of This Issue

News and Statistics

American Maize Elects..... 4
Bunker Oil Price Increase Blocked 4
Business Review of 1941..... 33
Chemical Workers Show Decrease. 5
Chemical Companies Dissolved..... 7
Distillers Must Use Grain for Alcohol 3
DCAT Appoints Sectional Dinner Leaders 118
Ethyl, Butyl, Isopropyl Alcohols Restricted in Production and Use. 3
Glass Container Size Simplification Asked 5
Harrison Made Vice-President of Ayerst, McKenna & Harrison.... 120
Houghton, Inc., Moves..... 101
Ittner Receives Perkin Medal..... 3
Lumber Dealers Ass'n Enjoined from Price-Fixing..... 5
Methanol Prohibited for Antifreeze Use 3
Mutual Chemical Has Booklet on Anodizing Aluminum..... 124
N. Y. Produce Exchange Club Bridge January 14..... 111
Oil Pipeline to be Opened..... 121
OPM Denies Restriction on Sale of Batteries 5
Paint, Varnish, Lacquer Sales: November 105
Patent Right Limited..... 7
Peppermint Oil Ceiling Parley..... 7
Penna. Salt Advances Beitzel..... 7
Pest Control Operators Southern Meeting Jan. 26..... 5
Price Ceiling Changed on Used Steel Drums..... 3
Purocaine Enlarges Quarters..... 101
Plastics Meeting Set for January 14 3
Pfizer Moves Purchasing Dept. to Brooklyn 4
Pyrethrum Lost in Fire..... 4
Synthesizing Drying Oils..... 7
Shell Names Oostermeyer..... 7
Selenium, Tellurium Industrial Uses Studied..... 3
Sohn Named President of Standard Pharmaceutical 125
Textile Ass'n Names Advisors..... 7
Tung Oil Distribution Restricted by OPM 5
U.S.P. Convention By-Laws and Constitution Revision Offered.. 3
Wax Trade Price Protests to Get OPA Hearing..... 111
Washington Talks It Over..... 5
War Production Ass'ns Plans Cleared by OPM..... 5

General Features

Advertisers' index.....127
Bids Wanted 4
Chemical Price Trends..... 4
Classified Advertisements.....126
Closing Market Developments.... 4
Contracts Awarded..... —
Corporation Earnings..... —
Defense Contract Awards..... —
Defense Materials Price Trend... 4
Dividends Declared..... —
Editorials 30
Foreign Trade Openings..... —
Foreign Trade Rules..... —
Industrial Uses of Chemicals.... 32
Obituaries 102
OPD Price Index..... 4
Prices Current 9
Scientific, Professional Services..122
Trade News Briefs..... —
Washington Talks It Over..... 5
What You Can Use..... —
Where You can Sell..... 32

Market Reports

Botanical Drugs, Spices, Gums...117
Coaltar Chemicals.....100
Drugs and Fine Chemicals.....113
Dyestuffs, Textile and Leather Chemicals 103
Essential Oils and Aromatics....119
Fertilizer Materials.....123
Heavy Chemicals..... 97
Oils, Fats and Waxes.....109
Paint, Varnish and Lacquer Materials 105
Petroleum Products 121

Shipping Information

Cargo Ship Arrivals..... —
Charters ..... —
Coastwise Shipments..... —
Exports ..... —
Imports 124
Imports Detained..... —

Chemical Price Level Raised

Some few noticeable price reductions were made last week in the markets for chemicals and related materials. The cut on quicksilver was outstanding. But, many more prices were moved in the opposite direction and the general average got a bit of a boost. Acetic acid was the major influence.

Business was being further pared in the civilian section, but was more than equally growing in respect of war materials. The outlook for civilian supplies got slimmer; many materials will gradually be pushed out of that side of the picture, and some will be out within a very short time. The dogs of war are starting to take all manner of things to their master.

Prices were advanced on acetic acid, diacetone alcohol, acetanilide, butyl lactate, dibutyl ether, chloral hydrate, turmerics, tapioca flour, lard, tallow, grease, perilla, soybean, and corn oils, technical olive oils, fatty acids of castor and coconut oils, gum rosin, gum and destructively distilled wood turpentines, oil of lime, film scrap, sassafras and wild cherry barks, pinkroot, a variety of spices, tankage, and dried blood.

Prices were reduced on quicksilver, menthol, and half a dozen spices.

The result of the changes is shown in the *OPD Price Index* at the top of the column on the left.

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American Maize Elects Sander as President

Theodore Sander, jr., was elected president of the American Maize-Products Company last week. He was formerly vice-president. He succeeds Donald K. David who, on February 1,

Theodore Sander, Jr.

will become associate dean of the school of business administration of Harvard University. Mr. David had been president of the company for ten years and will continue as chairman of the executive committee.

Mr. Sander is a graduate of the school of business administration of Harvard University. Previous to joining the American Maize-Products Company he was associated with the St. Paul Association of Commerce, being Industrial Commissioner of that body for the last three years of this connection.

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Pyrethrum, Arabic and Copra Lost in Pier Fire

Six thousand bags of gum arabic, in addition to a quantity of pyrethrum flowers, was destroyed January 8 when the municipal-owned Pier 83 was razed by fire of unknown origin. Possible sabotage is being investigated by the FBI and the New York fire department authorities.

The arabic left Port Sudan last July on the steamship Iris, bound for Mombassa. On arrival, the gum was discharged to await transhipment on another freighter bound for the United States.

After months on the Mombassa wharf the gum was loaded on the steamship Charles H. Cramp and arrived here about ten days ago. Indiscriminate stowage of the arabic when loaded at Mombassa kept the gum on the pier for sorting as to ownership. Otherwise the gum would have been in the owners' warehouses when the fire started. The ship also carried 4,373 bags of wattel bark, 3,496 bags of mangrove bark, 3,250 tons of chrome ore, 280 bags of chillies, and 40 bags of beeswax. The fate of this merchandise was not reported.

On the pier, in addition to the arabic and pyrethrum, was 8,200 bags of copra, discharged from the steamship Lancaster and destroyed in the fire. The Lancaster also carried fish liver, hake liver and shark liver oils; 9 bales of buchu; 3,768 bales of wattle bark, and 6,750 tons of chrome ore.

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Defense Materials Price-Index Trend

During the week ended January 3 there was little change in markets for materials classified by the Army and Navy Munitions Board as strategic and critical. With a decline of 50 cents per unit in quotations for domestic tungsten ore the Bureau of Labor Statistics index for strategic materials dropped 0.1 percent to 143.1 percent of the August, 1939, average. Index numbers of market prices of strategic and critical materials are:—

(August, 1939 = 100)

	Strategic.	Critical.
December 27.....	143.2	118.9
January 3.....	143.1	118.9

Chemical Workers Show Decrease

Employment Shows 1.9 Decline Payroll Totals Gain 1.3 Percent Both Are Above 1940 Figures

Employment in factories engaged in the manufacture of chemicals and related products in the United States noted a decrease of 0.9 percent from October 15 to November 15, according to the Bureau of Labor Statistics. At the end of the monthly period employment was 1.8 percent above the corresponding level of 1939. Payrolls showed a gain of 1.1 percent from October 15 to November 15, and stood 13.9 percent above corresponding level for 1939.

The Bureau of Labor Statistics index number for factory employment in the chemical group of industries November 15 was 147.3 (100 equals 1923-25 average), compared with 148.1 for October 15 and 125.3 for November, last year. For payroll totals the index number was 193 (same basis), compared with 190.7 for October and 139.4 for November, last year.

The Bureau's general index numbers for all manufacturing industries April 15, 1940, showed the following comparisons:—

	1941 Nov.	1941 Oct.	1940 Nov.
Employment	134.5	135.3	114.7
Payroll totals	165.5	166.6	116.4

Employment in the chemical group of industries was 1.9 percent above the average of all industries. Payroll totals were 1.1 percent above the general average for industries.

—*Continued on page* 102

War Production Ass'ns Plans Cleaved by OPM

OPD Washington Bureau
January 6, 1942

An arrangement with Thurman Arnold, assistant attorney general of the Antitrust Division of the Department of Justice, to expedite legal clearance of proposed war production associations was announced by Floyd B. Odlum, Director of OPM's Division of Contract Distribution.

Organization plans of proposed associations must be passed upon by representatives of the Division of Contract Distribution and by the Department of Justice, to make sure that they do not run counter to the antitrust laws. Until the new arrangement was worked out, all proposals to form such associations had to be cleared by the Department of Justice in Washington.

Now, as before, the first step for manufacturers to take toward forming a production association or pool is to get in touch with the nearest field office of the Division of Contract Distribution, outline their intentions

—*Continued on page* 99

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OPM Denies Restriction On Sale of Batteries

OPD Washington Bureau
January 7, 1942

The Office of Production Management today announced it had no intention of interfering with the free sale of batteries or spark plugs for replacement purposes for automobiles and trucks. Likewise, it was said, there is no intention of rationing these products.

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Pest Control Operators Southern Meeting Jan. 26

The Fourth Annual Southern Pest Control Operators Conference will be held at the Louisiana State University, January 26-28. Among the addresses scheduled are the following:—

"Know Your Insects."
"The Structure of Insect Pests and Their Identification."
"Chemicals, the Pest Control Operators' Industry and the War."
"Termites and Their Control."
"How I Do a Termite Job."
"General Discussion of Termites."
"Powder Post Beetles."
"Building Structures."
"Wood Fungi."
"Wood Boring Beetles."
"The Fumigation of a Building."
"Rats and Mice."
"Rat Control."

Washington Talks It Over

Observations • Prognostications • Developments

By OPD Observer

President Roosevelt's war production program and his accompanying budget and tax recommendations are so costly that it almost takes an astronomer to handle the figures. But economists and production experts say the goal can be met.

The Census Bureau comes to the aid of us eighth-grade methematicians with some comparisons of the $56,000,000,000 the administration proposes to spend on the war during the next eighteen months, saying:—

It represents $1,600 for each of the approximately 35,000,000 families as shown by the 1940 census.

It represents $420 for each of 132,000,000 people.

It is about $4,000,000,000 more than the total gross sales of more than 1,770,000 retailers in the United States for 1941 as reported to the Bureau of the Census.

It is about equivalent to the entire dollar value of all the products turned out in 1939 by the 184,000 factories in the United States, as shown by the 1940 census.

It is nearly $13,000,000,000 more than the gross value of all land, buildings, machinery, equipment, and livestock on the 6,097,000 farms of the United States, as reported to 1940 census enumerators.

It is $21,000,000,000 more than the total value of all securities listed on the New York Stock Exchange.

It reresents $3,295 an hour for all time that has elapsed since the dawn of Christianity.

Fats to Be Seized

Seizure of all surplus inventories of fats and oils is under contemplation, and OPM is expected to issue an order within a few days in the form of an amendment to its recent order prohibiting the accumulation of inventories of some 1,800 fats and oils in excess of ninety days' normal supply.

It is understood that the order will permit all users to retain 90-day inventories but all supplies above that will be requisitioned at cost plus transportation charges, or at the ceiling price, whichever is higher.

Also under consideration is a plan to prohibit the use of certain fats and oils for certain designated purposes in order to conserve them for special uses, palm oil for quenching tinplate, for example.

War Spirits

The sudden tightness in alcohol, resulting in a series of drastic OPM orders, is owing to the demands of actual war and the President's tremendous program of armament production. He didn't say anything about powder; but every plane, tank, and ship he listed must have guns, and the guns must have ammunition—and it takes a pound of alcohol to make a pound of smokeless powder. So we must make a lot more alcohol and divert as much of it as can be spared to war production.

A secondary reason is that sugar and blackstrap molasses aren't coming in from Hawaii and the Philippines any more, and all edible elements of sugarcane juice must be made into sugar instead of alcohol. In issuing its orders, OPM cut across at least two bitter internal trade fights, one in the whisky industry as to whether or not a suitable distillery should be asked to drop all its beverage business to make war alcohol, and one in the industrial alcohol trade over whether distillers should be permitted to get into the business by breaking down the legal distinctions which have kept industrial alcohol in a privileged class for many years. OPM decided both questions on the basis of getting the alcohol for the government and quickly.

Next step may be a big increase in the production of synthetic ethyl alcohol, if priorities can be obtained for the equipment, and if this is done the seaboard molasses distillers may face a dark future. So far, farm chemurgy has not been mentioned as slated for recall by way of the Chemical Foundation's farm-alcohol factory which flunked.

Menthol Relief

Food and Drug Administration has advised inquirers that there is nothing in the law to prevent the use of menthol which does not meet U.S.P. specifications in nonoffcial preparations, provided the label states the menthol is nonofficial. If the deviation affects the properties of the finished article, this is a material fact which should be stated.

The ruling is expected to be of assistance to some drug manufacturers having difficulty obtaining official menthol and not needing it for their preparations. Much off-key synthetic menthol can be made.

Chloroacetic Acid Inedible

FDA has also ruled that monochloroacetic acid may not be used as a food preservative, saying that tests on animals have shown it to be quite toxic and its presence in food would constitute an added poisonous or deleterious substance not required by good manufacturing practice.

Sulphuric Drums

A contribution of the Interstate Commerce Commission toward conservation of time and red tape during the war effort is elimination of formal hearings in certain types of cases. Within a few days I.C.C. will issue one of its periodic amendments to docket 3666, regulations for shipping dangerous articles, and will give interested parties twenty days to comment in writing, dispensing with both its formal hearing and the customary informal one before the Bureau of Explosives.

One of the amendments expected to be in the batch will permit the use of a 16-gauge, all-welded, single-trip steel drum for shipping sulphuric acid for export—and possibly also for domestic—movements, quite an innovation and a steel-saver.

FTC Speed

Issuance of a complaint by the Federal Trade Commission against the Willat method of permanent hairwaving recalls that when Congress was writing the food, drug, and cosmetic act some folks wanted FTC to have a big part in its administration, while champions of the Food and Drug Administration said FTC procedure was too slow to protect the public.

Last April FDA charged that the ammonium hydrogen sulphide used in the Willat method was harmful to health and had caused the death of one beauty-parlor patron, and its inspectors immediately seized all stocks on the market. This week FTC reached the same conclusion and gave the manufacturer twenty days to show why it shouldn't stop advertising that its product is harmless, ignoring the fact that the stuff hasn't been on the market for nine months.

Small Aid to Small Business

OPM has finally agreed on a plan to let small businesses get supplies of scarce materials to keep them from closing down, but the plan is extremely limited and is not at all like the "pool" idea of Floyd B. Odlum, head of the Divison of Contract Distribution, which would have set aside definite quantities of materials on which any small business could draw just because it was small. Instead, each concern's troubles will be considered on the basis of individual hardship by the appropriate OPM branch for its industry.

Details have not yet been worked out, but it is understood that the chances of a small manufacturer for getting an allocation will depend on such factors as his attempts to use substitutes, efforts to find war work, general efficiency, nature of his prod-

—*Continued on page* 111

Tung Oil Distribution Restricted by OPM

OPD Washington Bureau
January 8, 1942

Restrictions on the distribution and use of tung (chinawood) oil were laid by OPM today in general preference order M-57.

This order became effective immediately. It is a temporary order and will expire February 15. It sets forth all the customary "M" order preamble about the existence of a shortage and the need to conserve supplies. It applies to dealers, meaning any person selling tung oil, and to all persons buying or accepting delivery of or using the oil. Provision is made for appeals by persons who feel that they are unreasonably affected by the order; the Director of Priorities will be the judge of such cases.

The restrictive provisions of the order are as follows:—

(C) Restrictions on use and deliveries of tung oil. Notwithstanding anything contained in priorities regulation No. 1 to the contrary, after the effective date of this order no dealer shall sell or deliver and no person shall buy or accept delivery of tung oil and no person shall hereafter use or process any tung oil, except upon the following categories of orders:—

(1) Defense orders having preference ratings of A-2 or better.

(2) Orders placed by Defense Supplies Corporation.

(3) Orders for the manufacture of can linings for cans to contain food products for human consumption.

(4) Orders for the manufacture of outside can coatings where wood oil is essential to withstand normal food processing.

(5) Orders for uses to comply with underwriters' regulations, health, sanitary or safety regulations or laws issued by Government authority, provided the pertinent provisions of such laws or regulations were in effect both on December 1, 1941, and on the date of such use and specifically require the use of tung oil or a product required specifically to be made from tung oil.

Arrangements are being made for the Defense Supplies Corporation to purchase all existing supplies of tung oil and all future imports.

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Lumber Dealers Ass'n Gets Price-Fixing Order

Denver, Jan. 5, 1942

The National Retail Lumber Dealers Association and twenty-two State and regional dealer organizations are enjoined from price-fixing and allocations of markets and customers, under the provisions of a consent decree filed in the Federal district court here last week.

The Department of Justice announced entry of the decree along with the filing of a civil suit alleging violation of the antitrust laws through a program of restricted distribution in the sale of lumber products, cement and other building materials in thirty-five States.

The case grew out of the two indictments returned by a Federal grand jury here last April 14. Some of those indicted, the department said, had pleaded nolo contendere and paid a total of $78,320 in fines.

The civil complaint, which was filed as a necessary prelude to the consent decree, charged that the defendant associations—representing about 20,000 retail lumber dealers over the nation—had conspired to suppress competition, fix prices, allocate territories and customers and compel manufacturers and wholesalers to refuse to sell to dealers who were not on the list of "recognized" dealers compiled from the membership of the associations.

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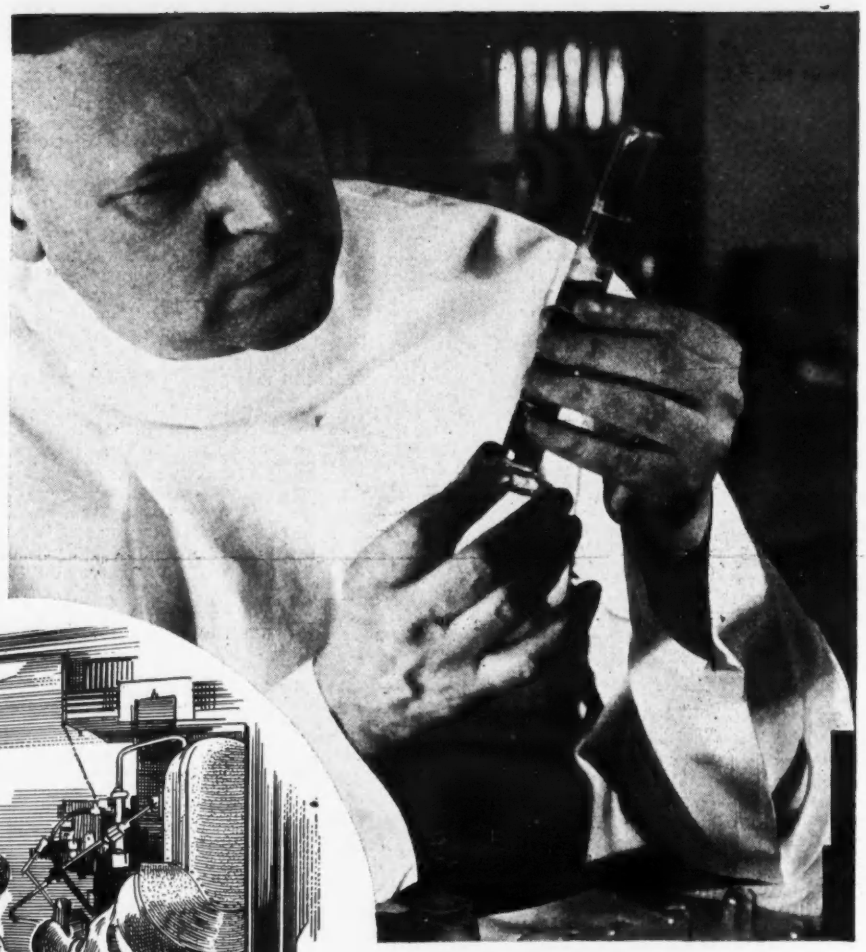
Glass Container Size Simplification Asked

OPD Washington Bureau
January 5, 1942

Because of the scarcity of soda ash and other chemicals used in the glass-container industry, the bureau of industrial conservation of the Office of Production Management today requested a program of simplified bottle sizes, shapes and finishes wherever possible. The program, as outlined, would call for greater use of large size containers, elimination of a large variety of sizes and fancy designs and conservation of paper used for ship-

conservation of paper.



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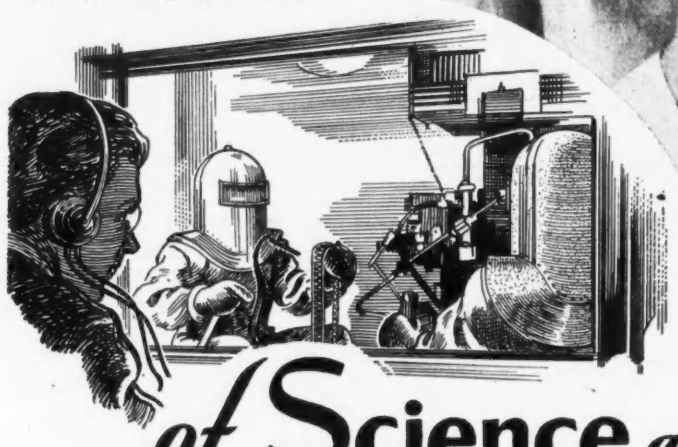

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NYQ NYQ

Textile Color Card Ass'n Names Advisory Group

The Textile Color Card Association has appointed an advisory committee, composed of representatives of leading dyestuffs producers, in order to make certain that the color the association issues are not only fashionable but also obtainable, according to Margaret Hayden Rorke, managing director of the association.

The function of this committee will be to guide the association's various color committees on all dyestuff problems so that when seasonal colors for textiles, shoes and leather, gloves and hosiery are chosen the association will be assured that at the time the shades can be produced without affecting the government's needs for vital materials.

Members of the committee are B. R. Price, of the National Aniline division of Allied Chemical & Dye Corporation; J. F. Warner, of the Calco Chemical division, American Cyanamid Company; Samuel I. Parker, Ciba Company; W. F. Van Riper, E. I. du Pont de Nemours & Co., Inc.; Daniel P. Knowland, Geigy Company; J. R. Bonnar, General Dyestuff Corporation, and James Walker, Sandoz Chemical Works, Inc.

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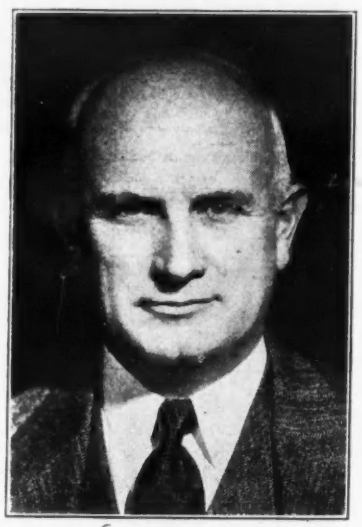
Penna. Salt Makes Beitzel Vice-President

The Pennsylvania Salt Manufacturing Company has promoted George B. Beitzel from manager of sales to vice-president in charge of sales. He has been affiliated with the company for twelve years.

Educated at the University of Pennsylvania, Mr. Beitzel served in World War No. 1, and advanced from a private to first lieutenant. After the war, Mr. Beitzel spent a number of years with the John T. Lewis & Bros. Company, before joining the Pennsylvania Salt. He is president of the Sales Managers' Association of Philadelphia.



George B. Beitzel

The Pennsylvania Salt Manufacturing Company manufactures chlorine, caustic soda, ammonia, hydrogen peroxide, and other chemical products and imports cryolite from Greenland.

Synthesizing Drying Oils

Process of Producing Conjugation in Unconjugated Polyenes

Specifications and Claims of United States Patent 2,242,230 Issued May 20, 1941, to George O. Burr, Assignor to Regents of the University of Minnesota

Continued from Jan. 5 Issue

Example VI

In the above examples it has been shown that the conjugated structure may be produced in fatty acids and various other acids, after a treatment with alkali metal alcoholates, depending upon the amount of unconjugated double bond material present. In the present example the effectiveness of this procedure is further demonstrated.

Six and eight-tenths grams of metallic sodium are first dissolved in 100 cubic-centimeters of freshly distilled ethyl alcohol to produce a 20 percent solution of sodium ethylate in ethyl alcohol. Five cubic-centimeter portions of the 20 percent sodium ethylate solution are then added to 1 cubic-centimeter each of the substances listed below and an additional 5 cubic-centimeter portion of ethyl alcohol added to each aliquot portion as a solvent. The samples should then be sealed in glass tubes after partial evacuation so as to prevent oxidation and heated for 109 hours at 98° C. As a result of this procedure conjugation is produced in those substances in which unconjugated double bonds originally were present, as indicated by the following absorption tests:—

Substance treated.	Absorption at 2350 Angstrom units.	Absorption at 2700 Angstrom units.	Reputed linoleic acid percent content.
Linolic acid	462.5	4.1	100
Corn oil	366	8.2	50
Cottonseed oil	308	3.2	40
Peanut oil	231	2.4	24
Poppyseed oil	426	20.5	58
Sunflower seed oil	328	3.1	57
Butter	29.2	7	3
Hydrogenated cottonseed oil—			
Sample No. 1	35.5	1.1	7
Sample No. 2	83.15	2.7	11
Lard	57.3	55.5	10

In the first six substances treated in accordance with this example large increases in conjugation were produced as indicated by the large absorption factor at 2350 Angstrom units, whereas with butter, the hydrogenated cottonseed oils and lard, relatively small absorption factors are noted at 2350 Angstrom units. This is believed to be due to the low content of linoleic acid in these latter subtances.

Example VII

The relation between the rated linolic acid and linolenic acid value or higher unsaturated fatty acid content of the various oils to the production of conjugation as shown by the preceding example, is further demonstrated by the following procedures.

In carrying out this procedure fatty acids of various oils as tabulated in this example are admixed with four times their volume of a solution of sodium butylate in butyl alcohol which may be prepared by dissolving 6 grams of metallic sodium in 100 cubic centimeters of butyl alcohol. Each of the samples except codliver oil should be treated with 20 percent sodium butylate reagent. The codliver oil is preferably treated with a 5 percent sodium butylate solution rather than more concentrated solution because of the greater reactivity of codliver oil as compared with, for instance, corn or cottonseed oil. The addition of sodium butylate solution to the fatty acid immediately produces the corresponding soaps in each sample and each is then diluted with two volumes of additional butyl alcohol as to produce solution. The samples are then enclosed in tubes and sealed after partial evacuation and heated for seven hours at 150° C. Since the tubes are sealed, the pressure generated within then permits the use of higher operating temperatures which causes the reaction to proceed rapidly. At the end of the reaction period the butyl alcohol is driven off by heating at 100° C. under vacuum and the treated fatty acids are isolated. Spectrographic analysis at about 2350 and about 2700 Angstrom units, "diene value" determinations in accordance with the Kaufman method and the "iodine number" determinations in accordance with the Hanus method are then made. The results of such procedure show the production of conjugation in each of the materials as indicated by the three tests for conjugation, as follows:—

Material (fatty acids) treated.	Absorption factor at about 2350 Angstrom units.	Absorption factor at about 2700 Angstrom units.	Diene No. Kaufman method.	Iodine No. Hanus method.	Original iodine No.
Corn	386	39.4	13.3	111.5	127.5
Cottonseed	304	15.7	11.0	98.6	111.3
Peanut	243	14.6	7.6	100.0	....
Soyabean	447	44.7	10.8	119.5	....
Linseed	583	302	18.8	148.5	180.0
Codliver	210	218	7.7	149.0	....

This example demonstrates that by the use of our procedure conjugation may be produced and that the "iodine number" may be reduced from the high value corresponding to the raw material to the value corresponding to that of conjugated double bond containing compounds which are known to have abnormally low "iodine values."

Example VIII

The reaction of the present method may also be carried out with alkaline reacting salts although the increase in conjugation produced by this procedure is not as large as that produced by the procedures outlined in the preceding examples wherein the yields were approximately quantitative. As an example of the procedure using alkaline salts, linseed oil fatty acids should be dissolved in amhydrous butyl alcohol and treated with an excess of each of the dry salts given below, the amount of salt being based upon the theoretical quantity of fatty acid present. In each case the linseed oil acid, alcohol, salt mixture should be sealed in a glass tube after partial evacuation and heated for thirty-six hours at 175° C.:—

Salts used with the linseed oil fatty acids.	Absorption factor at about 2350 Angstrom units.	Absorption factor at about 2760 Angstrom units.
Potassium acetate, anhydrous	13.8	17.5
Trisodium phosphate	5.1	1.7
Potassium acid phosphate	5.5	1.8
Borax, anhydrous	4.7	1.7
Sodium benzoate	16.5	2.0
Potassium thiocyanate	9.3	1.2
Borax in glycerol	5.5	2.4

Example IX

The rate at which the conversion of the unconjugated structure to the conjugated structure takes place, or the velocity of the reaction, is proportional to the amount of the bisic reagent present. When less than the stoichiometric euivalent quantity of basic reagent is used, based upon the amount of fatty acid present or developed in the solution, no appreciable reaction is produced. This is dem-

Continued on page 99

Patent Gives No Right To Control Accessories

OPD Washington Bureau
January 7, 1942

Federal courts should not accept patent infringement suits in cases where the patent-holder is using his patent to restrain competition in an unpatented commodity, the Supreme Court of the United States held in two opinions handed down this week.

In the first of these cases, the Morton Salt Company versus the G. S. Suppiger Company, the trial court, without passing on the issues of validity and infringement, granted summary judgment dismissing the complaint. The case had been brought by the Suppiger company which asked an injunction against the Morton company and an accounting for infringement of a patent on a machine for depositing salt tablets, a device used in the canning industry for adding predetermined amounts of salt in tablet form to the contents of the cans.

The trial court took the ground that the Suppiger company was making use of the patent to restrain the sale of salt tablets in competition with its own sale of unpatented tablets, by requiring licensees to use with the

—*Continued on page* 121

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Shell Chemical Names Oostermeyer President

The Shell Chemical Company, San Francisco, has elected J. Oostermeyer president. He succeeds C. B. de Bruijn, who retired after thirty-three years of service.

Mr. Oostermeyer, long experienced in the marketing of petroleum products, having been connected with the Shell interests for more than twenty-five years, lived for sometime in the Orient and South America. He has been vice-president since 1939.

J. Oostermeyer

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Peppermint Oil Price Ceiling Parley Jan. 13

OPD Washington Bureau
January 5, 1942

Advisability of establishing maximum prices for oil of peppermint, which has almost doubled in price since mid-November, will be discussed by the Office of Price Administration at a meeting here with growers of mint, representative oil dealers and consumers, January 13, Leon Henderson, Administrator, announced today.

Notice of the meeting, which will be held in Temporary building "D," Sixth street and Independence avenue, S.W., has been given to agricultural extension directors in the principal commercial mint growing States—Indiana, Michigan, Ohio, California, Oregon, and Washington—in order that they may notify mint growers in their respective localities.

Prices quoted by dealers have risen from about $3.90 per pound in the middle of November to about $7.50 per pound at present.

Chemical Companies Dissolved By N. Y. State in 1940 Listed

Albany, January 10, 1942

Listed among 11,500 companies dissolved by proclamation of Secretary of State Michael F. Walsh, for failure to file reports and pay corporation taxes for three consecutive years, are 183 corporations, the names of which are indicative of drug and chemical or oil and paint corporations. These names have been gleaned by a check-up through the printed list of 11,500 dissolved corporations.

Any corporation listed as dissolved may proceed to annul its dissolution, at any time within 3 months from December 15, through the payment of its back corporate taxes, penalties and interest charges, and a fee of $50 for the filing of a certificate of reinstatement. Any corporation listed as dissolved, if such listing is through error, can on proper application, be reinstated without payment of any fee. As corporate taxes due constitute a lien against any property owned by a corporation, any going concern, with its name appearing on the list should take immediate steps to secure reinstatement.

A list of dissolved corporations, which by name are indicated to be drug and chemical or oil and paint companies follows:—

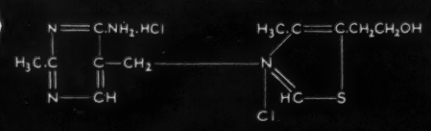
Drug, Chemical Corporations

Aberdeem Laboratories, Inc., Abrevaya Pharmacy, Inc., Acme Soda Fountain

—*Continued on page* 123

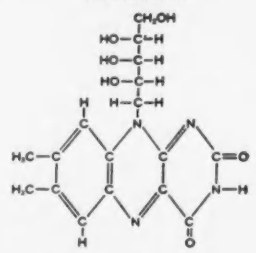
MERCK PURE VITAMINS

THIAMINE HYDROCHLORIDE MERCK (U. S. P.)



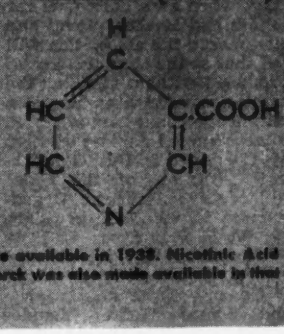
Synthesized in the Merck Research Laboratories in 1936. Made available in 1937.

RIBOFLAVIN MERCK



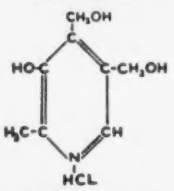
Made available in 1938.

NICOTINIC ACID MERCK (U. S. P.)



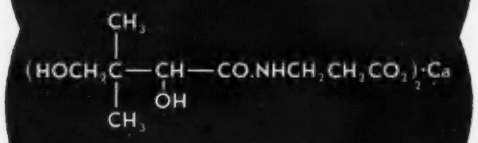
Made available in 1938. Nicotinic Acid Amide Merck was also made available in that year.

VITAMIN B_6 HYDROCHLORIDE MERCK



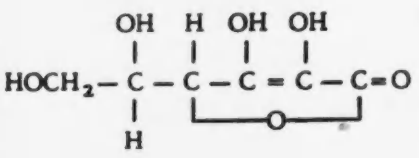
Synthesized in the Merck Research Laboratories in 1939. Made available in 1940.

CALCIUM PANTOTHENATE DEXTROROTATORY MERCK



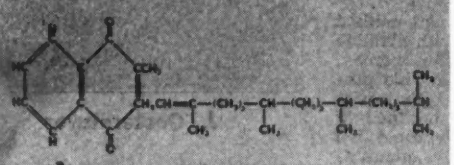
Identified and synthesized by Merck chemists and their collaborators in other laboratories in 1940. Made available during the same year.

ASCORBIC ACID MERCK (U. S. P.)



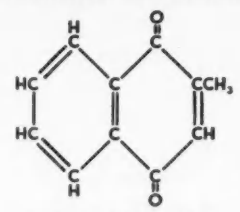
Made available in 1934.

2-METHYL-3-PHYTYL-1, 4-NAPHTHOQUINONE MERCK (Vitamin K_1)



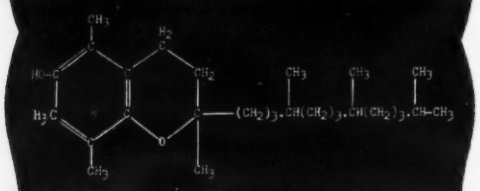
Made available in 1940.

2-METHYL-1, 4-NAPHTHOQUINONE MERCK (Vitamin K Active)



Made available in 1940.

ALPHA-TOCOPHEROL MERCK (Vitamin E)



Made available in 1940.

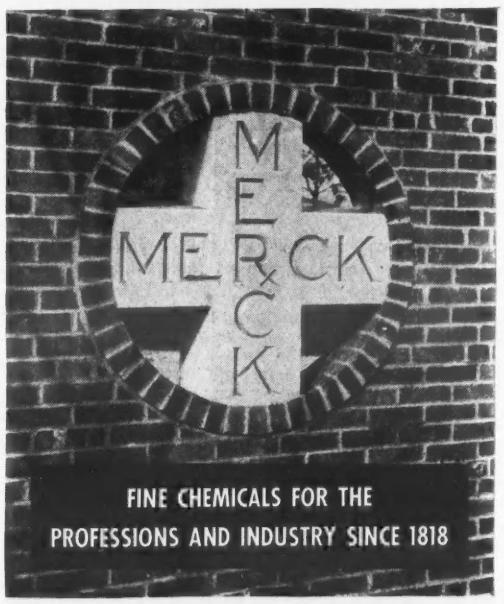
DESIRABLE vitamin combinations can be easily formulated through the use of Merck Pure Vitamins. By using these pure chemicals of known and uniform potency, the proportions of the individual vitamins can be readily adjusted to meet the pharmaceutical manufacturer's specific requirements. It is only through the use of these pure vitamins that the high dosages indicated in severe deficiency states can be provided.

The identity of pure vitamins produced by chemical synthesis and pure vitamins derived from natural sources—in chemical composition, physiologic function, and physical characteristics—is definitely and authoritatively established.

Our scientific staff and laboratories are prepared to serve you.

MERCK & CO. Inc. *Manufacturing Chemists* RAHWAY, N. J.

NEW YORK · PHILADELPHIA · ST. LOUIS • *In Canada:* MERCK & Co. Ltd., Montreal and Toronto



Current Market Quotations

January 9, 1942

All matter under this heading fully protected by copyright

Unless otherwise indicated, quotations are first-hands on large lots, f.o.b. New York. Price changes, trends, and resale prices are noted in the market reports, with other informative comment. The locations of the several reports is indicated on page 4.

Defense Status of Materials

Application of SPAB regulations to materials listed below is indicated by superior figures as follows:—[1] Price Ceiling; [2] Price Suggestion or Agreement; [3] Full Priority Control; [4] Industry Control; [5] General Limitation Order; [6] Critical List (Army and Navy Munitions Board); [7] Allocation

A

Acacia (see Gum, arabic).

Acetal, cbys., works.....lb. 1.00 - 1.50

Acetaldehyde, 99%, dms., 55 and 110 gls., works..lb. .11 - —
5 and 10 gls., works.....lb. .14 - —

Acetaldol (see Aldol).

Acetamide, CP, kgs., 5,000 lbs. a year, works..lb. .36 - —
200-lb. lots, works.....lb. .38 - —
100-lb. lots, works.....lb. .55 - —
5 to 50-lb. lots, works....lb. .70 - —
tech., kgs., 5,000 lbs. a year, works..lb. .28 - —
500-lb. lots, works.....lb. .30 - —
100-lb. lots, works.....lb. .45 - —
5 to 50-lb. lots, works....lb. .50 - —

Acetanilide, tech., cryst., bbls.lb. .29 - .31
powd., bbls.....lb. .27 - .29
USP, cryst., bbls., 2,000-lb. lots, lb. .36 - —
smaller lots.....lb. .37 - —
dms., 25-lb. lots.....lb. .42 - —
kgs., 2,000-lb. lots.....lb. .37 - —
smaller lots.....lb. .38 - —
powd., bbls., 2,000-lb. lots..lb. .34 - —
smaller lots.....lb. .35 - —
dms., 25-lb. lots.....lb. .40 - —
kgs., 2,000-lb. lots.....lb. .35 - —
smaller lots.....lb. .36 - —

Acetoacetanilide, dms.....lb. .57½- .75½

Acetone, CP,[1,6] dms., c.l., dlvd.lb. .08½- .173
l.c.l., dlvd.....lb. .09 - .178
tanks, dlvd.....lb. .07 - .158

Methyl (see M).

* The term 'Eastern' territory means the States of New Mexico, Colorado, Wyoming, Montana and all States east thereof, and the term 'Western' territory shall mean all other States of the United States.

Acetonitrile, dms., works.....lb. 1.00 - 2.00

Acetophenone, cns., dms.....lb. 1.55 - 1.60

Acetophenetidin, bbls., kgs., 1,000 lbs..lb. 1.00 - —
50 lbs., dms.....lb. 1.08 - —
25 lbs., dms.....lb. 1.10 - —

Acid, abietic, dms., c.l., f.o.b. all points in U.S. E. of and including Kans., Neb., N.D., Okla., S.D., Tex. E. of Austin and Brownsville..lb. .08¾- —

Acetic,[1] com'l or redist., 28%, bbls..100 lbs. 3.38 - 3.63
cbys, cs.....100 lbs. 3.88 - 4.13
56%, bbls.....100 lbs. 5.58 - 5.83
cbys, cs.....100 lbs. 6.08 - 6.58
70%, bbls.....100 lbs. 6.68 - 6.93
cbys., cs.....100 lbs. 7.18 - 7.43
80%, bbls.....100 lbs. 7.47 - 7.72
cbys., cs.....100 lbs. 7.97 - 8.12
glacial, nat., CP, cbys.100 lbs.14.20 -14.45
99.5%, bbls.....100 lbs. 9.15 - 9.40
cbys. .....100 lbs. 9.65 - 9.90
tanks, works.....100 lbs. 6.93 - —
USP, cbys.....100 lbs.11.70 - —
synth., 99.5%, al. dms., wks., 100 lbs. 9.15 - 9.40
tanks, works.....100 lbs. 6.25 - 6.93
USP XI, al. dms., works, 100 lbs.10.95 -11.20
CP, dms., works.....100 lbs.14.20 -14.45
pure, 30%, bbls.....100 lbs. 4.44 - 4.69
cbys., cs.....100 lbs. 4.94 - 5.19
36%, bbls.....100 lbs. 4.86 - 5.11
cbys., cs.....100 lbs. 5.36 - 5.61
60%, bbls.....100 lbs. 7.60 - 7.85
cbys., cs.....100 lbs. 8.10 - 8.35
80%, bbls.....100 lbs. 9.26 - 9.51
cbys., cs.....100 lbs. 9.76 -10.01

Acetic acid price differentials above are for c.l. and l.c.l. quantities; the prices apply delivered within the Metropolitan zones unless otherwise indicated in the above prices.

Acetic, anhydride,[3] dms., c.l., frt. alid..lb. .11½- —
tech., dms., frt. alid.....lb. .13 - —

Acetylsalicylic, special, USP, fine cryst., gran., 200-lb. bbls.lb. .45 - —
standard, USP, fine cryst., gran., 20 or 40 mesh, 200-lb. bbls..lb. .40 - —
powd., 30 mesh, 200-lb. bbls, lb. .40 - —

Adipic, fib. dms., works.....lb. .31 - —

Anthranilic, refd., bbls.....lb. 1.15 - 1.20
tech., bbls.....lb. .75 - —

Arsenous, tech. (see Arsenic, White).
USP, powd., dms., kegs....lb. .20 - .22

Ascorbic, bots., dms.....oz. 1.85 - 2.10

Battery, cbys., c.l., E. works, 100 lbs. 1.60 - —
10-25, E. works....100 lbs. 1.95 - —
1-9, E. works.....100 lbs. 2.55 - —

Benzoic, tech., bbls., 4,000 lbs. or more..lb. .43 - —
1,000 to 3,900 lbs.....lb. .44 - —
900 lbs. or less.....lb. .47 - —
USP, bbls., 4,000 lbs. or more, lb. .54 - —
1,000 to 3,900 lbs.....lb. .55 - —
900 lbs. or less.....lb. .58 - .59
dms., 4,000 lbs. or more..lb. .55 - .56
1,000 to 3,900 lbs.....lb. .56 - .57
900 lbs. or less.....lb. .59 - .60

Acid, boric, tech., 99.5%, gran., bulk, frt. alld..ton.99.50 - —
bgs., c.l., frt. alld...ton.99.00 - —
ton lots, ex whse...ton.111.00 - —
less than ton lots, ex whse..ton.121.00 - —
bbls., c.l., frt. alld..ton.108.00 - —
ton lots, ex whse..ton.120.00 - —
less than ton lots ex whse..ton.125.00 - —
powd., bgs., c.l., frt. alld., ton.104.00 - —
ton lots, ex whse...ton.116.00 - —
less than ton lots, ex whse..ton.121.00 - —
bbls., c.l., frt. alld..ton.113.00 - —
ton lots, ex whse...ton.125.00 - —
less than ton lots, ex whse..ton.130.00 - —
USP $25 per ton higher.

Butyric, 99%, dms., c.l., S. Charleston, W. Va..lb. .22 - —
l.c.l., same basis.....lb. .23 - —
tanks, same basis.....lb. .21 - —

Broenner's, bbls.....lb. 1.11 - —

Camphoric, cns.....lb. 6.95 - 7.00

Capric, dms.....lb. .21½- .22

Caproic, dms, works.....lb. .25 - .30

Caprylic, dms.....lb. .27 - .27½

Castor oil,[5] split, dms.....lb. .19¼- .19¾

Chlorosulphonic, dms., c.l., wks., lb. .03 - —
5-drum lots, works.....lb. .03½- —
single drums.....lb. .04½- —
tanks, works.....lb. .02½- —

Chromic,[2,6] 99%, dms., c.l., dlvd. N. Y..lb. .16¼- —
l.c.l., 5 tons, dlvd. N. Y., lb. .16¾- —
smaller quantities, dlvd. N. Y..lb. .17¼- .18¼

Cinnamic, refd., bots.....lb. 3.50 Nom.

Citric, cryst., gran., bbls., car lots..lb. .20 - —
10,000-lb. lots, one shipt., lb. .20½- —
smaller lots.....lb. .21 - —
anhydr., gran., dms., 10,000 lbs., one shipt..lb. .23 - —
smaller lots.....lb. .23½- .26½

Citric acid quotations on powder are ½c. higher than on granular. Keg packing is ½c. higher than barrels. Prices are f.o.b. N.Y. Chicago and St. Louis deliveries are ½c. higher than N.Y.

Cleve's, bbls.....lb. .65 - —

Coconut oil,[5] dist., dms.....lb. .18½- .19

Cottonseed oil,[5] dist., dms...lb. .13¾- .14¼
tanks .....lb. .13¼- —

Cresylic (coaltar),[4,7] high-boil 50%, 210°-215°, dms., c.l., l.c.l., same basis....gal. .83 - .86
works, frt. equald..gal. .81 - .84
special blends (50%, 210°-215°), dms., c.l., works, frt. equald..gal. .81 - .84
l.c.l., same basis....gal. .83 - .86
low-boil (50%, 204°-206°), dms., c.l., works, frt. equald..gal. .81 - .84
l.c.l., same basis....gal. .83 - .86
special blends (50%, 204°-206°), dms., c.l., works, frt. equald..gal. .81 - .84
l.c.l., same basis....gal. .83 - .86
imported, pale, dms....gal. No prices

Diethylbarbituric (see Barbital).

Formic, dom., 90%, cbys., c.l., works..lb. .10¼- —
l.c.l., 5 cbys. and over..lb. .11 - —
1-24 cbys.....lb. .11¼- —

Fumaric, tech., special, bbls., ton lots..lb. .27 - —
smaller lots, bbls., dms...lb. .28 - .31

Gallic, tech., bbls.....lb. 1.10 - 1.13
NF VI, bbls., 200 lbs., 5 or more..lb. 1.27 - —
smaller lots.....lb. 1.30 - —
fib. dms., 25 lbs.....lb. 1.34 - —

Gamma, bbls.....lb. .85 - —

Gluconic, tech., 50%, bbls., 500 lbs..lb. .12 - —
100-lb. kgs.....lb. .15 - —
25 or 50-lb. demij.....lb. .21 - .23
5-lb. bots.....lb. .29 - —

H, bbls.....lb. .45 - —

Hydriodic 45-47%, cbys.....lb. 2.42 - 2.44
5-lb. bots.....lb. 2.57 - —
57%, bots.....lb. 2.90 - —

Hydrobromic, 10% dilute, cbys., lb. .20 - —
concentrated, 34%, cbys....lb. .35 - —

Hydrochloric (see Muriatic).

Hydrocyanic, cyls, works....lb. .80 - 1.00

Hydrofluoric, 30%, bbls.....lb. .06 - .06½
rubber, dms.....lb. .08 - .08½
48%, lead, cbys.....lb. .12 - —
rubber, dms.....lb. .11 - —
52%, lead, cbys.....lb. .13 - —
rubber, dms.....lb. .12 - —
60%, lead, cbys.....lb. .14 - —
rubber, dms.....lb. .13 - —

Hydrofluosilic, 30-35%, 420 lbs., bbls..lb. .09 - .09½

Acid, hypophosphorus, USP, 30%, djns..lb. .75 - .80

Lactic, tech., dark, 22%, bbls., c.l., works..100 lbs. 2.90 - —
l.c.l., works.....100 lbs. 3.15 - —
cbys., works...100 lbs. 4.15 - —
44%, bbls., c.l., works.... 100 lbs. 6.30 - —
l.c.l., bbls., works.... 100 lbs. 6.55 - —
cbys., works...100 lbs. 7.55 - —
light, 22%, bbls., c.l., works, 100 lbs. 3.90 - —
l.c.l., works....100 lbs. 4.15 - —
cbys., works...100 lbs. 5.15 - —
44%, bbls., c.l., works.... 100 lbs. 7.30 - —
l.c.l., works....100 lbs. 7.55 - —
cbys., works...100 lbs. 8.55 - —
50%, edible, 20 or more cbys..lb. 12½- —
5 to 19 cbys.....lb. .13 - —
1 to 4 cbys.....lb. .13½- —
80%, bbls., cbys., 5 or more, lb. .24¼- —
1 to 4 cbys.....lb. .24¾- —
plastic grade, bbls., cbys., 20 or more..lb. .14¼- —
5 to 10 cbys.....lb. .14¾- —
1 to 4 cbys.....lb. .15¼- —
USP XI, 85%, cbys.....lb. .54 - .57
USP VIII, 75%, cbys.....lb. .52 - .55

Lauric, dist., tech., dms.....lb. .20 - .20½

Laurent's, bbls.....lb. .45 - —

Linseed oil,[5] light, dms.....lb. .17¾- .18¼

Maleic, powd., dms.....lb. .30 - —
anhydride, dms., c.l.....lb. .25 - —
l.c.l. .....lb. .26 - —

Malic, powd., kegs.....lb. .47 - —

Mandelic, dms., 1,000 lbs....lb. 2.05 - —
smaller lots.....lb. 2.10 - 2.15

Mixed, tanks, nitric unit....lb. .05 - .06
sulphuric unit.....lb. .0085- .009

Molybdic, kegs, works.....lb. .95 - 1.10

Monochloracetic, tech., bbls..lb. .15 - .18

Monosulphonic, bbls.....lb. 1.50 - —

Muriatic, 18°, cbys., c.l., E., works..100 lbs. 1.50 - —
l.c.l., 25 and over, E., works..100 lbs. 1.75 - —
10 to 24, works...100 lbs. 1.85 - —
1 to 9, works...100 lbs. 2.45 - —
tanks, works.....100 lbs. 1.05 - —
20°, cbys., c.l., E. works, 100 lbs. 1.75 - —
l.c.l., 25 and over, works, 100 lbs. 2.00 - —
10 to 24, works...100 lbs. 2.10 - —
1 to 9, works...100 lbs. 2.70 - —
tanks, works.....100 lbs. 1.15 - —
22°, cbys., c.l., E. works, 100 lbs. 2.25 - —
l.c.l., 25 and over, works, 100 lbs. 2.50 - —
10 to 24, works...100 lbs. 2.60 - —
1 to 9, works...100 lbs. 3.20 - —
tanks, works.....100 lbs. 1.65 - —
CP, dealers, cbys.....lb. .06½- —
6-lb. bots.....lb. .17½- —
consumers, cbys.....lb. .08 - —
6-lb. bots.....lb. .19 - —

Myristic, dist., dms.....lb. .18 - .18½

Naphthenic, dom., acidity 220-230, dms, c.l., works..lb. .10 - —
l.c.l., works.....lb. .11 - —
tanks, works.....lb. .09 - —
235-245 acidity, dms., c.l., works..lb. .12 - —
l.c.l., works.....lb. .13 - —
tanks, c.l., works.....lb. .11 - —

Nicotinic, 100-lb. cns.....lb. 7.15 - —
50-lb. cns.....lb. 7.25 - —
25-lb. cns.....lb. 7.30 - —
5-lb. bots.....lb. 7.46 - —
1-lb. bots.....lb. 7.50 - —

Nicotine, amide, 25-lb. lots...lb.18.00 - —
5-lb. lots.....lb.18.25 - —

Nitric, 36°, cbys., c.l., E. works, 100 lbs. 5.00 - —
l.c.l., 25 and over, E. works..100 lbs. 5.25 - —
10 to 24, works...100 lbs. 5.35 - —
1 to 9, works...100 lbs. 5.95 - —
38°, cbys., c.l., E. works, 100 lbs. 5.50 - —
Western, works..100 lbs. 5.75 - —
l.c.l., 25 and over, E. works..100 lbs. 5.75 - —
10 to 24, works...100 lbs. 5.85 - —
1 to 9, works...100 lbs. 6.45 - —
40°, cbys., c.l., E. works, 100 lbs. 6.00 - —
l.c.l., 25 and over, E. works..100 lbs. 6.25 - —
10 to 24, works...100 lbs. 6.35 - —
1 to 9, works...100 lbs. 6.95 - —
42°, cbys., c.l., E. works, 100 lbs. 6.50 - —
l.c.l., 25 and over, works, 100 lbs. 6.75 - —
10 to 24, works...100 lbs. 6.85 - —
1 to 9, works...100 lbs. 7.45 - —
CP, USP, dealers, cbys....lb. .11½- —
7-lb. bots.....lb. .21½- —
consumers, cbys.....lb. .13 - —
7-lb. bots.....lb. .23 - —

Oleum (see sulphuric fuming).

Oxalic, dom., bbls., c.l., works, lb. .11¼- —
10,000 lbs. or over.....lb. .11¼- —
smaller quantities.....lb. .12½- .14½

Acacia—Acrylonitrile

Acid, palm oil, white, dist., dms., lb. .13 - .13½
tanks .....lb. .12½- —

Paraminobenzoic, cns.....lb. 1.40 - —

Paranitrobenzoic, cns.....lb. .72 - —

Phenylacetic, bots.....lb. 1.85 - 1.90

Phosphoric, 50%, pure food grade, c.l., bbls., works, frt. equald.... 100 lbs. 4.00 - 4.25
cbys., works frt. equald., 100 lbs. 4.35 - 4.60
l.c.l., 10 or more, wks., frt. alld..100 lbs. 5.25 - 6.25
1 to 9 cbys., works, frt. alld..100 lbs. 5.25 - 7.25
tankwagon, dlvd., N. Y., Phila. Met. area..100 lbs. 4.00 - —
75% pure food grade, c.l., bbls., works, frt. equald., 100 lbs. 4.75 - 5.00
cbys., works, frt. equald., 100 lbs. 5.10 - 5.35
l.c.l., 10 or more, wks., frt. alld..100 lbs. 7.00 - 8.50
1 to 9 cbys., works, frt. alld..100 lbs. 8.00 - 9.60
tankcars, works, frt. equald..100 lbs. 4.00 - 4.25
tankwagons, dlvd., N.Y., Phila. Met. area..100 lbs. 4.75 - —
USP, 85%, s. g., 1.710 cbys., 180 lbs..lb. .12 - —
50%, s. g., 1.347, cbys., 70 lbs..lb. .10½- —
dms., 25 lbs.....lb. .13 - —
10%, dilut., cbys., djns...lb. .07 - .07½

Picramic, kgs.....lb. .65 - .70

Picric, bbls.....lb. .35 - —

Propionate, synth, pure, 55-gal. dms., returnable, works..lb. .14 - —
tanks, works.....lb. .11 - —

Pyrogallic, tech., lump, powd., bbls..lb. 1.45 - —
cns. .....lb. 1.63 - —
USP, cryst., cns.....lb. 2.10 - —
resub., cns.....lb. 2.60 - —

Pyroligneous, bbls., dlvd. E.gal. .25 - —

Ricinoleic, com'l, split (see Acid, castor oil, split), tech., dms., works.....lb. .32 - .37

Salicylic, tech., bbls.....lb. .33 - —
USP, bbls.....lb. .35 - .38

Sebasic, tech., bbls., works..lb. .32 - —

Soybean oil,[5] dist., dms.....lb. .18¾- .19¼

Stearic,[5] dist., double pressed, bgs., dlvd..lb. .14½- .15¼
single pressed, bgs., dlvd...lb. .13¾- .14¾
triple pressed, bgs., dlvd...lb. .17 - .18
saponif., double pressed, bgs., dlvd..lb. .14½- .15½
triple pressed, bgs., dlvd..lb. .17¼- .18¼

Succinic, bbls.....lb. .75 - —

Sulphanilic, CP, bots., works.lb. 1.60 - 1.63
tech., dms., works.....lb. .17 - —

Sulphuric, 60°, cbys., c.l., E. works..100 lbs. 1.25 - —
l.c.l., 25 and over, works, 100 lbs. 1.50 - —
10 to 24, works...100 lbs. 1.60 - —
1 to 9, works...100 lbs. 2.20 - —
tanks, E., works.....ton.13.00 - —
66°, cbys., c.l., E. works, 100 lbs. 1.50 - —
l.c.l.,25 and over, works, 100 lbs. 1.75 - —
10 to 24, works...100 lbs. 1.85 - —
1 to 9, works...100 lbs. 2.45 - —
tanks, E., works.....ton.16.50 - —
98°, tanks, works.....ton.17.50 - —
CP, USP, dealers, cbys.....lb. .06½- —
9-lb. bots.....lb. .15¼- —
consumers, cbys.....lb. .08 - —
9-lb. bots.....lb. .17 - —
fuming, 20%, tanks, E. works, ton.19.50 - —

Tannic, tech., bbls., dms.....lb. .71 - .73
USP, fluffy, bbls., 1,000-lb. lots..lb. 1.33 - —
100-lb. lots.....lb. 1.35 - —
25-lb. lots.....lb. 1.38 - —
powd., bbls., 1,000 lbs....lb. 1.13 - —
smaller lots.....lb. 1.15 - —

Tartaric, USP, dom., cryst., gran., powd., bbls., 10,000 lbs. or more, one shipt...lb. .70½- —
smaller quantities.....lb. .71 - —
kgs. .....lb. .71½- —

Tobias, bbls.....lb. .55 - .60

Trichloracetic, bots.....lb. 2.00 - 2.50

Tungstic, CP, 100-lb. pkg....lb. 2.94 - 3.10
pure, 100-lb. pkg.....lb. 2.86 - —

Aconite, leaves, bls.....lb. 1.20 - 1.25
Root, bls.....lb. 1.25 - 1.30

Aconitine, amorph., bots.....oz.23.00 -28.00
15-gr. vials.....vial. 1.60 - —
cryst., bots.....oz.42.00 -48.00
15-gr. vials.....vial. 1.60 - —

Acrylonitrile, dms., c.l.....lb. .34½- —
5,000 lbs. or more.....lb. .35 - —
1 ton to 4,999 lbs.....lb. .35½- —
1 dm. to 1 ton.....lb. .36 - —
tank cars.....lb. .34 - —

Alepe Lanae—Barytes

Adepe lanae, anhyd., dms....lb. .30 - .32
hyd., dms....lb. .29 - .31
Agar, Kobe No. 1, strip....lb. 4.75 Nom.
Agaric, white, bls....lb. No stocks
Albumen, blood, lark, flake, c.l., f.o.b. Chicago, frt. alld..lb. .12½- —
ton lots, frt. alld....lb. .14 - —
bgs., same basis....lb. .15 - .20
light, dom., flake, dms., f.o.b. Chicago, frt. alld..lb. .65 - .75
import., bgs....lb. No prices
Egg, ed., dom., cryst., bbls..lb. 1.80 - 1.85
powd., dms., bbls....lb. 1.85 - 1.90
import., cs....lb. 1.80 - 1.85
Alcohol, amyl (see also Fusel oil, refd.), ex pentane, dms., c.l., frt. alld..lb. .141 - —
l.c.l., frt. alld....lb. .151 - —
tanks, frt. alld....lb. .131 - —
normal, dms., l.c.l., works..lb. .42 - —
Tertiary, refd., dms., l.c.l., frt. alld..lb. .09 - —
Benzyl, cns....lb. .65 - .75
drums....lb. .63 - —
Butyl, normal,[1] dms., c.l., frt. alld..lb. .13½- .168
l.c.l., frt. alld....lb. .14 - .173
tanks, frt. alld....lb. .12½- .158

• The term 'Eastern' territory means the States of New Mexico, Colorado, Wyoming, Montana and all States east thereof, and the term 'Western' territory shall mean all other States of the United States.

secondary, dms., c.l., frt. paid E. of Miss. R..lb. .09½- —
l.c.l., same terms....lb. .10 - —
tanks, same terms....lb. .08½- —
tertiary, denaturing, c.l., dms., lb. .12½- —
l.c.l., dms....lb. .13 - —
Cetyl, dom., CP, fiber ctns., 1,000 lbs..lb. 1.50 - —
500 lbs....lb. 1.70 - —
100 lbs....lb. 1.80 - —
25 lbs....lb. 1.90 - —
5 lbs....lb. 2.00 - —
Cinnamic, bots....lb. 3.00 - 3.60
Denatured,[1,2,3] CD14, dms., c.l., dlvd., E..gal. .65 - —
l.c.l., dlvd., dms....gal. .72 - —
tanks, E., dlvd....lb. .58 - —

Prices for territories other than E. of Rockies are 1½c. per gal. less than Eastern works quotations. Tankcar sales require written authorization by Alcohol Tax Unit.

SD1 190 pf., bbls., c.l., E. works..gal. .62 - —
19 bbls., E. works..gal. .64 - —
1 to 18 bbls., E. works, gal. .67 - —
dms., c.l., E. works...gal. .60 - —
19 dms., E. works...gal. .62 - —
1 to 18 dms....gal. .65 - —
tanks, E. works....gal. .53 - —

Anhydrous 3c. per gal. higher.

SD2B, dms., c.l., works, E. gal. .57 - —
19 dms., works, E...gal. .59 - —
1 to 18 dms., works, E. gal. .62 - —
tanks, E. works....gal. .50 - —

SD23G, works, E., c.l., dms. gal. .63 - —
19 dms....gal. .65 - —
1 to 18 dms....gal. .68 - —
tanks....gal. .56 - —

Prices for territories other than E. of Rockies are 1½c. per gal. less than Eastern works quotations.

SD23H, works, c.l., dms..gal. .50½- —
19 dms....gal. .61½- —
1 to 18 dms....gal. .64½- —
tanks....gal. .52½- —

SD 29, denatured with acetaldehyde, dms., c.l., E. works..gal. .58 - —
l.c.l., 19 or more, E. works..gal. .42 - —
1-18, E., works....gal. .45 - —
tanks, E., works....gal. .51 - —

When any of the several SD29 denaturants is supplied by the purchaser, the prices are the same as those for SD2B, plus 1½c. per gal. denaturing charge.

Special solvent, dms., c.l., works..gal. .61 - —
20 dms., to c.l.....gal. .63 - —
1 to 19 dms....gal. .66 - —
tanks, E. works....gal. .54 - —

Tankcar sales require written authorization by Alcohol Tax Unit.

Diacetone, acetone-free, dms., c.l., dlvd..lb. .11½- .14½
l.c.l., dlvd....lb. .12 - .15
tanks, dlvd....lb. .10½- .13½
tech., dms., c.l., dlvd....lb. .11 - .13½
l.c.l., dlvd....lb. .11½- .14
tanks, dlvd....lb. .10 - .12½
Ethyl, 190 pf., ex. molasses, dms., c.l..lb. 8.19 - —
19 dms....gal. 8.22½- —
5 to 8 dms....gal. 8.25½- —
1 to 4 dms....gal. 8.25½- —
tanks....gal. 8.12 - —
absolute, dms., c.l.....gal. 8.64 - —
19 dms....gal. 8.67½- —
5 to 18 dms....gal. 8.69½- —
1 to 4 dms....gal. 8.69½- —

Ethyl alcohol in bbls. 2c. higher than dms.

Grain alcohol 25c. gal. higher.

Ethylhexyl, dms., c.l., works..lb. .24 - —
l.c.l., same basis....lb. .25 - —
tanks, same basis....lb. .23 - —
Furfuryl, tech., cns., works..lb. .35 - —
dms., c.l., 33,000 lbs., works, lb. .20 - —
l.c.l., 500 lbs. and more, works..lb. .25 - —
Isoamyl (see Carbinol Isobutyl).
Isobutyl, refd., dms., works..lb. .0860- —
tanks, same basis....lb. .0760- —
Isopropyl,[2] refd., 91%, dms., 5 gals., f.o.b. dest..gal. .66½- —
55 gals., c.l., same basis, gal. .40½- —
l.c.l., same basis...gal. .43½- —
tanks, frt. alld....gal. .34 - —
99%, dms., 5 gals., same basis..gal. .65 - —
55 gals., c.l., same basis, gal. .44 - —
l.c.l., same basis...gal. .47 - —
tanks, same basis....gal. .37½- —
Methyl (see Methanol).
Phenylethyl, bots., cns....lb. 2.10 - 2.50
Polyvinyl, type A, fiber-pack, 2,000 lbs. and over, f.o.b. cars, Niagara Falls..lb. .65 - —
less than 2,000 lbs....lb. .70 - —
type B, fiber-pack, 2,000 lbs. and over, same basis..lb. .69 - —
less than 2,000 lbs....lb. .65 - —
Propyl, normal, dms., works, gal. .67 - .70
Octyl (see Ethylhexyl alcohol).
Tetrahydrofurfuryl, dms., contract, f.o.b. Waverly, N.Y..lb. .44 - —
450-lb. lots, same basis...lb. .50 - —
ens., f.o.b. Cedar Rapids, Ia. lb. .55 - —
Aldehol, denat., grade., dms., tanks, works..gal. .70 - .72
Aldehyde, bisulphite, bbls., works, lb. .17 - —
smaller containers....lb. .20 - —
Aldol, 55 and 110-gal. dms., c.l., works..lb. .12 - —
l.c.l., works....lb. .13 - —
5-10-gal. dms., works...lb. .15 - —
Aletris root, bgs....lb. .55 - .56
Alizarin (see Red, alizarin).
Alkanet root, bgs....lb. .90 - 1.40
Allspice, Mexican, bgs....lb. .14 - .14½
Alpha tocopherol, ampules, per gram. 1.00 - 1.50
Aloe, Cape, cs....lb. .18 - .19
Curacao cs....lb. .68 - .70
gourds, bbls....lb. .80 - .85
Socotrine, kgs....lb. .58 - .60
Aloin, 140-lb. bbls....lb. 5.45 - —
100-lb. kgs....lb. 5.47 - —
25-lb. fib. dms....lb. 5.54 - —
Alphanaphthol, bbls....lb. .52 - —
Alphanaphthylamine, bbls....lb. .32 - —
Althea root, whole, bbls....lb. .45 - .46
Alum, ammonia, burnt, USP, bbls., kgs..lb. .16 - .18
gran., bbls., works....100 lbs. 4.00 - —
dlvd., N. Y., Phil..100 lbs. 4.00 - —
lump, bbls., works....100 lbs. 4.25 - —
dlvd., N. Y., Phil..100 lbs. 4.25 - —
powd., bbls., works....100 lbs. 4.40 - —
dlvd., N. Y., Phil..100 lbs. 4.40 - —

Ammonia alum prices are for contract and open market; f.o.b. Phila.; frt. equalized with Marcus Hook, Boston, Atlanta, or Joliet; rail or water rates, whichever is lower. L.c.l. quantities must carry l.c.l. rate applying; for truck or ex warehouse deliveries all metrop. zones (except N. Y.) add l.c.l. rail or water rate, whichever is lower, from shipping or equalization point, dlvd., N.C. price apply to truck or ex warehouse.

Potash, gran., bbls., works.... 100 lbs. 4.25 - —
dlvd., N. Y., Phila...100 lbs. 4.25 - —
lump, bbls., works....100 lbs. 4.50 - —
dlvd., N. Y., Phila...100 lbs. 4.50 - —
powd., bbls., works....100 lbs. 4.65 - —
dlvd., N. Y., Phila...100 lbs. 4.65 - —

Potash alum prices on same basis as those for ammonia alum.

Chrome, bbls....lb. .12½- .15
Soda, bbls., c.l., works..100 lbs. 3.25 - —
l.c.l., dlvd....100 lbs. 4.25 - 5.00
Alumina acetate, tech., basic, powd., insoluble, bbls., 1 to 9, dlvd..lb. .40 - —
smaller containers...lb. .50 - —
solut., 24%, l.c.l., 10 or over, dlvd..lb. .09½- —
1 to 9, dlvd....lb. .10 - —
normal, solut., 20%, bbls., l.c.l., 10 or over, dlvd., lb. .08½- —
1 to 9, dlvd....lb. .09 - —
Chloride, anhyd., com'l, dms, (extra), 45,000 lbs. and over, works..lb. .08 - —
12,000 to 40,000 lbs., works..lb. .09 - —
1,100 to 11,000 lbs., works, lb. .10 - —
140 to 375 lbs., works..lb. .11 - —
100 lbs. or less, works..lb. .12 - —
cryst., com'l, dms., c.l., works, lb. .06 - —
l.c.l., works....lb. .06½- .06¾
solut., 32 deg., cbys., c.l., works..lb. .02¾- —
l.c.l., works....lb. .03¼- —
Formate, 30% solut., bbls., c.l., dlvd..lb. .13 - —
l.c.l., dlvd....lb. .15 - —
Hydrate, heavy, bbls., c.l., works..lb. .0340- —
l.c.l., bbls., works....lb. .04 - —
bgs., c.l., works....lb. .0310- —
light, bgs., c.l., dlvd....lb. .14 - —
l.c.l., bgs., dlvd....lb. .14½- —
bbls., c.l., dlvd....lb. .14½- —
l.c.l., bbls., dlvd....lb. .15 - —
Oleate, dms., contract....lb. .17½- —
open order....lb. .17½- .20
Palmitate, precip., bbls....lb. .25 - .26
Resinate, precip., dms., dlvd.lb. .15 - —
Stearate, precip., bbls., ctns., c.l..lb. .23 - —
l.c.l....lb. .24 - —
Sulphate, com'l, bgs., c.l., works, frt. equaled..100 lbs. 1.15 - 1.25
l.c.l., works, frt. equald. 100 lbs. 1.40 - 1.50
bbls., c.l., works....100 lbs. 1.35 - 1.45
l.c.l., works, frt. equald. 100 lbs. 1.60 - 1.70
iron free, bgs., c.l., works, 100 lbs. 1.75 - 1.85
l.c.l., works....100 lbs. 2.00 - 2.10
bbls., c.l., works....100 lbs. 1.95 - 2.05
l.c.l., works....100 lbs. 2.20 - 2.30
Aluminum, 98-99%, [2,4,4] c.l...lb. .15 - —
l.c.l....lb. .16 - —
paste, lining, extra fine, dms., 200 lbs..lb. .56 - —
standard, dms., 200 lbs....lb. .38 - —
Powder, lining, extra fine, dms., 200 lbs..lb. .93 - —
standard, dms., 200 lbs....lb. .59 - —
litho, lining, dms., 200 lbs..lb. .57 - —
unpolished, dms., 200 lbs..lb. .36 - —
varnish, standard, dms., 200 lbs..lb. .40 - —

Aluminum paste and powder prices are 5c. per lb. higher for less than 200 lbs.; for containers, smaller than drums, prices are 1c. per lb. higher for 100 lbs.; 1½c. per lb. higher for 50 lbs.; 3c. per lb. higher for 10 lbs.; 5c. per lb. higher for 2 lbs.; 8c. per lb. higher for 1 lb.; and 12c. per lb. for ½ lb. Transportation allowed East of Mississippi.

Ambergris, gray, tins....oz. 17.00 -18.00
Aminomethylpropanol, dms., wks., lb. .50 - —
5 and 10-gal. cans, works..lb. .60 - —
Aminopyrine, 100-lb. dms....lb. 4.60 - —
5-lb. bots....lb. 4.25 - —
Ammonia aldehyde, dms., works, lb. .65 - .70
Anhydrous[5], fertilizer, f.o.b. Belle, W. Va., frt. equal with Hopewell, Va...ton 90.00 - —
refrigeration[6], tanks, works, lb. .05 - —
pure, cycls., dlvd., met. N.Y. lb. .16 - —

Anhydrous ammonia in cylinders is quoted on a nationwide schedule of delivered and stock point prices in all States.

Aqua, 26°, cbys....lb. .05¼- —
dms., c.l....lb. .02¼- —
l.c.l....lb. .02½- —
tanks (on NH₃ content), f.o.b. works..lb. .04 - —
Benzoate, dms., kgs., 4,000 lbs. or more...lb. .43 - —
1,000 lbs. to 3,900 lbs....lb. .44 - —
900 lbs. or less....lb. .47 - —
Bicarbonate, dms., dlvd. Met. N.Y...lb. .0564-.0614
Bichromate, bbls....lb. .30 - .32
Bifluoride, bbls....lb. .15½- .18
Borate, bbls., kgs....lb. .15 - .16
Ammonia, bromide, gran., bbls., lb. .31 - .35
bxs....lb. .34 - .38
kegs....lb. .32 - .36
Carbonate, lump, dms., dlvd. Met. N. Y..lb. .08¼- .09¼
cns., same basis....lb. .14¼- —
powdered, 1c. per lb higher.
Chloride, tech. (see Ammoniac, salt).
USP, gran., 225-lb. bbls....lb. .12 - .13
100-lb. kgs....lb. .15 - —
Citrate, 250-lb. bbls....lb. .75 - —
100-lb. dms....lb. .80 - —
25-lb. dms....lb. .82 - —
25-lb. dms....lb. .84 - .85
Fluoride, bbls....lb. .18 - .20
Hydroxide (see Ammonia, aqua).
Hypophosphite, dms....lb. 1.25 - 1.27
jars....lb. 1.35 - —
Iodide, 5-lb. bots....lb. 3.71 - —
jars....lb. 3.65 - —
Linoleate, 80%, anhyd., bbls., lb. .12 - —
Molybdate, kgs., works....lb. 1.05 - 1.20
Nitrate, tech., bgs., works, 100 lbs. 4.35 - —
bbls., works....100 lbs. 4.55 - —
Oleate, dms....lb. .14 - —
Oxalate, neutral, powd., bbls., kgs..lb. .23 - .29
Perchlorate, kgs....lb. .55 - .65
Persulphate, kgs, dom....lb. .21 - .28
Phosphate, dibasic, NF V, bls. lb. .37 - —
kgs....lb. .39 - —
tech., bbls., c.l....lb. .07¼- —
l.c.l....lb. .08¾- .09¼
monobasic, crude (fert. grade), 11% N., 48% phos., bulk, f.o.b. E. works..unit-ton. No prices
pure, bbls....lb. .40 - .45
tech., bbls., c.l....lb. .07¼- —
l.c.l....lb. .08¾- .09¼
Salicylate, USP, kgs....lb. 1.15 - 1.20
Silicofluoride, bbls....lb. .15 - —
Stearate, anhydrous....lb. .21½- —
paste....lb. .06½- —
Sulphate[3], dom., bulk, c.l., contr., f.o.b. cars, ports, July-Dec. shipt..ton. 29.00 - —
spot, same basis....ton. 30.00 - —

Ammonia sulphate prices are $1 per ton less than above prices f.o.b. cars nearest inland producing oven.

Sulphide, liquid, 40-45%, basis 100%, dms., c.l., works, lb .07½- —
l.c.l., dlvd....lb .15 - —
tanks, dlvd....lb .07½- —
red, 48%, cbys., works....lb. .08 - —
dms., works....lb. .06 - —
yellow, 33%, cbys., works..lb. .08 - —
dms., works....lb. .06 - —
Sulphocyanide, C.P., dms....lb. .45 - .55
tech., kgs....lb. .40 - —
Ammoniac, gum (see Gum, ammoniac).
sal, gray, dom., bbls., c.l. 100 lbs. 5.50 - 5.75
l.c.l. 100 lbs. 6.00 - 6.70
white, gran., dom., bbls., c.l., works..100 lbs. 4.45 - —
l.c.l., same basis..100 lbs. 5.15 - —
Amyl acetate, ex fusel oil, tech., dms., c.l., dlvd..lb. .14½- .17
l.c.l., dlvd....lb. .15 - .17½
tanks, dlvd....lb. .13½- .16
ex-pentane, dms., c.l., frt. alld. E. of Miss. R..lb. .15½- —
l.c.l., same basis....lb. .16½- —
tanks, same basis....lb. .14½- —
Alcohol (see Alcohol amyl).
Butyrate, dms., 50 gal., returnable..lb. .75 - —
Caporate, cns....lb. 2.75 - —
Chlorides, mixed, tech., dms., c.l., lb. .07 - —
l.c.l....lb. .08 - —
tanks, works....lb. .06 - —
Ether, dms., c.l., works....lb. .09½- —
l.c.l., works....lb. .102 - —
tanks, works....lb. .08¼- —
Naphthalenes, mixed, crude, l.c.l., dms., works..lb. .14 - —
refd., l.c.l., dms., works..lb. .16 - —
Nitrite, bots....lb. 1.80 - 1.85
Mercaptan, dms., l.c.l., works, lb. 1.10 - —
Oleate, dms., l.c.l., works...lb. .31 - —
Salicylate, 5-lb bots....lb. .85 - —
Stearate, dms., l.c.l., works..lb. .32½- —
Amylene, dms., c.l., works....lb. .102 - —
l.c.l., works....lb. .11 - —
tanks, works....lb. .09 - —
Anethol, bots....lb. 1.30 - 1.35
cans....lb. 1.20 - 1.25
Angelica root, dom., bls....lb. .55 - .60
import., natural, bls....lb. 1.60 - 1.65
Angostura, bark, bls....lb. .26 - .29
Anilin oil, dms....lb. .15 - —
l.c.l....lb. .16 - —
tanks....lb. .14½- —
Salt, dms., works....lb. .22 - .24
Anise, Cyprus, bgs....lb. .39 - .41
Mexican, fair, bgs....lb. .33 - .38
Spanish, bgs....lb. .40 - .41
Star....lb. .38 - .39
Turkish, bgs....lb. .39 - .40
Anisic aldehyde, bots....lb. 3.25 - 3.35
Annatto paste, bxs....lb. .34 - .39
seed, bgs....lb. .06 - .06½
Anthracene, 80-85%, bbls., wks., lb. .55 - —
90%, bbls., works....lb. .65 - —
Anthraquinone, 99.5%, subl., bbls., lb. .70 - —
Antimony butter (see Antimony chloride).
Chloride, solut., cbys....lb. .17 - —
Metal,[2,4,6] spot....lb. .14 - —
Needle, brown, Bolivian, 67%, lb. .16½- .18½
Chinese, black, 70%....lb. .19 - .22
crude, bbls....lb. .17 - —
Oxide, bgs., c.l....lb. .15 - —
l.c.l....lb. .16½- —
Salt, 65%, dms., dlvd. E. of Miss. River..lb. .36 - —
bbls., same basis....lb. .34 - —
Antipyrene, bbls., kgs., ton lots, lb. 2.00 - —
smaller lots....lb. 2.10 - 2.20
Apomorphine, bots....oz. 23.20 -23.70
Archil extract, bbls....lb. .26 - —
Areca nuts, powd., bbls....lb. .15 - .16
Arecoline hydrobromide, bots..oz. 11.25 -11.50
Argols, test 70% to 85%, basis 100%, 100 kgm., purity, f.o.b. Spanish ports...100 kilos. 105.00 - —
Arnica flowers, bls....lb. 4.00 - 4.25
Root, bls....lb. 1.45 - 1.50
Arrowroot, St. Vincent, powd., bgs..lb. .10¼- .10¾
bbls....lb. .09¼- .09½
Arsenic, metal, lump, cs....lb. No prices
Chloride (arsenous), cns....lb. 4.85 - —
Iodide (arsenous), 5-lb. bots..lb. 5.58 - —
jars....lb. 5.43 - —
Red, import, cs....lb. No prices
Trioxide (see Acid, arsenous).
White, powd., kgs., c.l....lb. .04 - —
l.c.l....lb. .04¾- —
Asafetida, cs....lb. .45 - .55
powd., bbls., bxs....lb. .68 - .73
Asbestine (see Talc, N.Y. fibrous).
Asbestos fiber, 5D and 5K, bgs., c.l. (20 tons), Canad. mines..ton. 49.50 - —
5R, bgs., c.l. (20 tons), Canad. mines..ton. 44.00 - —
6D, bgs., c.l. (30 tons), Canad. mines..ton. 33.00 - —
7D, bgs., c.l. (30 tons), Canad. mines..ton. 28.50 - —
7F, bgs., c.l. (30 tons), Canad. mines..ton. 26.50 - —
7H, bgs., c.l. (30 tons), Canad. mines..ton. 22.50 - —
7K, bgs., c.l. (30 tons), Canad. mines..ton. 19.00 - —
7M, bgs., c.l. (30 tons), Canad. mines..ton. 16.50 - —
7R, bgs., c.l. (30 tons), Canad. mines..ton. 15.50 - —
Asphaltum, Manjak No. 10, crude, 20 tons, f.o.b. plant..lb. .04½- —
smaller lots, f.o.b. plant, lb. .05½- —
process form, bgs., 20 tons, f.o.b. plant..lb. .05 - —
smaller lots, f.o.b. plant, lb. .06 - —
California, dms., c.l., f.o.b. N.Y. ton. 20.00 - —
l.c.l., f.o.b. N. Y....ton. 36.50 - —
Cuban A, bgs., c.l., f.o.b. N.Y., ton. 60.00 - —
l.c.l., f.o.b. N. Y....ton. 90.00 - —
B, bgs., c.l., f.o.b. N. Y...ton. 35.00 - —
l.c.l., f.o.b. N. Y....ton. 55.00 - —
Egyptian, bgs., c.l., f.o.b. N. Y., lb. .12 - —
l.c.l., f.o.b. N. Y....lb. .15 - —
Gilsonite, brilliant black, selects, bgs., c.l., Western shipt. point..ton. 32.00 - —
seconds, bgs., c.l., Western shipt. points..ton. 25.50 - —
selects, bgs., c.l., Western shipt. points..ton. 30.50 - —
l.c.l., f.o.b. N. J. or N. Y., whse..ton. 58.00 - —
jet, bgs., c.l., Western shipping points..ton. 30.50 - —
Mexican, Texas, dms., c.l., refinery..ton. 19.00 - —
l.c.l., refinery....ton. 21.00 - —
tanks, refinery....ton. 16.00 - —
Petroleum, cut-back, bbls., l.c.l., E. cst., refinery..gal. .13 - —
dms., c.l., E. cst., refinery, gal. .12 - —
tanks, Calif., refinery...ton. 12.50 -14.00
East Coast, refinery...gal. .09 - .09½
Ill., Ind., refinery...gal. .06½- —
N. Orleans, refinery...gal. .06 - —
Atropine, bots....oz. 27.00 - —
Sulphate, bots....oz. 21.00 - —

B

Balm of Gilead buds, bgs....lb. .55 - .60
Barbasco root (see cube root).
Barberry bark, bgs....lb. .55 - .60
Tree bark, wls....lb. No stocks
Barbital, cs....lb. 3.50 - 3.60
sodium, cs....lb. 3.75 - —
Barium carbonate, natural, 99% thru 200 mesh, bgs., c.l., works..ton. 43.00 - —
precip., bgs., c.l., works..ton. 55.00 - —
l.c.l., works....ton. 60.00 - —
bbls., c.l., works....ton. 60.00 - —
l.c.l., works....ton. 65.00 - —
Sulphur-free, c.l., works..ton. 60.00 - —
l.c.l., works....ton. 65.00 - —
Chlorate, kgs....lb. .60 - —
Chloride, CP, cryst., bbls....lb. .25 - .27
pure, bbls., kgs....lb. .16 - .18
tech., dom., cryst., bgs., c.l., Zone 1, dlvd., New England States, N. Y., N. J., Pa., Md., Va., Ohio, Mich., Ind., Wisc., Ill., Ky., and principal cities on west bank of Miss., north of Miss., north of Ark. line....ton. 77.00 - —
bbls., same basis...ton. 79.00 - —
l.c.l., bgs., same basis, ton. 90.00 - —
bbls., same basis..ton. 92.00 - —
Zone 2, bgs., c.l., dlvd., Tenn., N.-S. Carolina, Ga., Ala., Miss., Fla., ton. 81.00 - —
bbls., same basis..ton. 83.00 - —
l.c.l., bgs., same basis, ton. 94.00 - —
bbls., same basis..ton. 96.00 - —
Zone 3, bgs., c.l., Minn., Ia., Mo., Col., N. Mex., Idaho, Utah, Ariz., ton. 87.00 - —
bbls., same basis..ton. 89.00 - —
l.c.l., bgs., same basis, ton. 100.00 - —
bbls., same basis..ton. 102.00 - —
Zone 4, bgs., c.l., dlvd., Wash., Ore., Calif., Nev..ton. 83.00 - —
bbls., same basis..ton. 85.00 - —
l.c.l., bgs., same basis, ton. 96.00 - —
bbls., same basis..ton. 98.00 - —
Dioxide, dms., c.l., works....lb. .10 - —
l.c.l., same basis....lb. .12 - .13
Fluoride, bbls....lb. .18 Nom.
Hydrate (see Hydroxide).
Hydroxide, bbls., works....lb. .06 - .07
Iodide, bots....lb. 4.77 - —
jars....lb. 4.62 - —
Monoxide (see Oxide).
Nitrate, cks....lb. .10½- .12½
Oxide, ungrd., dms., c.l., works, lb. .08 - —
l.c.l., same basis....lb. .10 - .13
grd., dms., l.c.l., works....lb. .11 - .15
Peroxide (see Dioxide).
Silicofluoride, bbls....lb. .15 - .17
Sulphate, tech. (see Barytes and blanc fixe).
X-ray, bbls....lb. .09½- .10
kgs....lb. .12 - —
Barytes, dom., floated, bbls., c.l., contr., St. Louis..ton. 27.65 - —
spot, same basis...ton. 27.65 - —
l.c.l., contr., same basis, ton. 28.65 - —
spot, same basis...ton. 28.65 - —
ex whse, N.Y....ton. 36.00 - —
paper bags, c.l., contr., St. Louis..ton. 25.35 - —
spot, same basis...ton. 25.35 - —
l.c.l., contr., same basis, ton. 26.35 - —
spot, same basis...ton. 26.35 - —
ex whse., New York. ton. 34.00 - —
Southern, off color, bgs., mines, ton. 17.50 - —
95.70%, bgs., mines....ton. 18.00 - —
ore, bulk, mines....ton. 8.00 - —
German, grd., bbls., c.l., dock, t.a...ton. No prices
l.c.l., ex whse....ton. No prices
ungrd., bulk, c.l., ex dock. ton. No prices
Italian, grd., bbls., c.l., ex dock, t.a...ton. No prices
l.c.l., ex whse....ton. No prices

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o-Aminodiphenyl technical—equally plentiful at 12¢ a pound—can relieve the shortage of aniline oil for many manufacturers. It also may be used in resin compositions and in the manufacture of dyestuffs of the quinoline yellow and Hansa yellow types.

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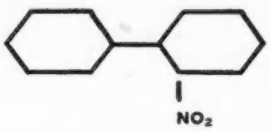


Molecular Weight: 199

o-NITRODIPHENYL
(Technical)

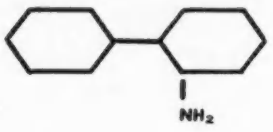
Appearance: Light yellow to reddish crystalline solid

Crystallizing Point: 34.5°C. Min.

SUGGESTED USES:

1. Intermediate in chemical synthesis. May be partially reduced and rearranged to give 2, 2'-diphenyl benzidine (NH_2=1).

2. Further nitration will give a dinitrodiphenyl which may possess interesting properties as a dyestuff intermediate.



Molecular Weight: 169

o-AMINODIPHENYL
(Technical)
(o-Phenyl Aniline)

Appearance: Purplish crystalline mass.

Crystallizing Point: 47.0°C. Min.

SUGGESTED USES:

1. In resin compositions.

2. In dyestuff synthesis to produce dyestuffs of the quinoline yellow series characterized by their fastness and a shade of yellow having a green tone. (U. S. Patent 2,211,662).

3. In the production of Hansa yellow dyestuffs through o-phenyl-aceto-acetanilid.

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Firm _____

Address _____ *City* _____

Bauxite—Borax

Bauxite, bulk, mines.....ton. 7 00 -10.00
Bay leaves (see Laurel leaves).
Bay Rum, tax extra, import, bbls..gal. .77½- .78½
Bayberry bark, bgs.....lb. .12 - .13
Belladonna leaves, bls.....lb. 3.45 - 3.50
Root, bls.....lb. 2.00 - 2.65
Bentonite, 200 mesh, bgs., Wyo., works..ton.11.00 - —
325 mesh, bgs., Wyo., works, ton.16.00 - —
Benzaldehyde, tech., cbys., dms., lb. .45 - .55
N.F. VI, dms., 50 to 100 lbs..lb. .85 - —
5 to 25 lbs.....lb. .90 - .95
Benzene (see Benzol).
Benzidin base, bbls.....lb. .70 - —
Benzocaine, cns.....lb. 3.00 - —
Benzol, 2, 90%, dms., returnable, works..gal. .20 - —
tankcars, frt. alld. E. of Omaha. gal. .15 - —
W. Coast, f.o.b. Minnequa, Colo..gal. .15 - —
tanks frt. alld. E. of Omaha up to 2c. per gallon.
Benzophenone, dms.....lb. 1.20 - 1.25
Benzoyl chloride, cbys.....lb. .28 - .28
Peroxide, pure, gran., fib. ctns., works..lb. 1.95 - —
Benzyl acetate, f.f.c., cns.....lb. .59 Nom.
dms.....lb. .55 Nom.
Alcohol (see Alcohol, benzyl).
Benzoate, a.m.a., f.f.c., cns..lb. .95 Nom.
dms.....lb. .90 Nom.
Chloride, cbys., frt. equald..lb. .22 - .24
Cinnamate, cns.....lb. 5.50 Nom.
Formate, cns.....lb. 3.50 - 3.75
Isoeugenol, bots.....lb. 9.50 - —
Propionate, bots.....lb. 2.25 Nom.
Salicylate, bots.....lb. 1.80 Nom.
Benzylidineacetone, bots.....lb. 2.00 - 2.10
Berberine bisulphate, cns.....lb.22.50 -38.50
Hydrochloride, cns.....lb.22.50 -38.50
Sulphate, cns.....lb.22.50 -38.50
Berberis root, bls.....lb. .10 - .11
Betanaphthol, sublim., kgs....lb. .55 - —
tech., bbls., c.l., works.....lb. .23 - —
l.c.l., bbls., works.....lb. .24 - —
Benzoate, fib. dms.....lb. 2.50 - —
kgs.....lb. 2.70 - —
Betanaphthylamine, tech., kgs.lb. .51 - —
Beth root, bls.....lb. .35 - .40
Bismuth chloride, 5-lb. bots...lb. 3.00 - —
jars.....lb. 2.85 - —
Citrate, USP, VIII, 5-lb. bots.....lb. 2.86 - —
jars.....lb. 2.75 - —
Hydroxide, 5-lb. bots.....lb. 3.46 - —
cns.....lb. 3.35 - —
Metal, ton lots.....lb. 1.25 - —
Nitrate, cryst., 5-lb. bots....lb. 1.45 - —
cns.....lb. 1.30 - —
Oxychloride, 5-lb. bots.....lb. 3.19 - —
cns., kgs.....lb. 3.10 - —
Subbenzoate, 5-lb. bots.....lb. 3.51 - —
fib. dms.....lb. 3.40 - —
Subcarbonate, bots., cns.....lb. 1.59 - 1.85
175-lb. bbls.....lb. 1.50 - —
Bismuth, subcarbonate, X-ray, 5-lb. bots..lb. 2.79 - —
fib. dms.....lb. 2.73 - —
Subgallate, bots., cns.....lb. 1.49 - 1.72
fib. dms.....lb. 1.40 - —
Subiodide, bots.....lb. 4.24 - —
fib. dms.....lb. 4.13 - —
Subnitrate, powd., bots., cns.lb. 1.29 - 1.57
250-lb. bbls.....lb. 1.20 - —
Subsalicylate, 60-66%, bots..lb. 2.59 - —
bbls., fib. dms.....lb. 2.50 - —
Subphocarbolate, 5-lb. bots...lb. 3.76 - —
fib. dms.....lb. 3.65 - —
Trioxide, powd., 5-lb. bots...lb. 3.76 - —
cns.....lb. 3.65 - —
Bismuth ammonia, citrate, USP, powd., 25-lb. dms..lb. 3.40 - —
5-lb. cns.....lb. 3.45 - 3.50
Black,[2] acetylene, c.l., works, duty paid..lb. .14 - —
Bone, 1A, c.l.....lb. .17 - —
l.c.l.....lb. .17½- —
3, c.l.....lb. .12 - —
l.c.l.....lb. 12½- —
4, c.l.....lb. .11 - —
l.c.l.....lb. .11½- —
5, c.l.....lb. .08¼- —
l.c.l.....lb. .09 - —
6, c.l.....lb. .08½- —
l.c.l.....lb. .09 - —
7, c.l.....lb. .11¼- —
l.c.l.....lb. .12 - —
8, c.l.....lb. .12½- —
l.c.l.....lb. .13 - —

Bone black prices are for barrels or bags, freight allowed East. Pacific Coast prices are 1½c. per lb. higher, ex dock or ex whse.

Black, carbon, regular, uncompressed, bgs., c.l., f.o.b. plants..lb. .03625- —
l.c.l., bgs. or cartons, f.o.b. whse..lb. .08 - —
dlvd.....lb. .08 - —
beads, compressed, bgs., c.l., f.o.b. plants..lb. .03550- —
l.c.l., bgs. or cartons, f.o.b. whse..lb. .07½- —
dlvd.....lb. .07½- —
bulk, cars, c.l., f.o.b. plants, lb. .0330- —
Charcoal (see C).
Graphite (see G).
Iron oxide, magnetic, pure, bbls., l.c.l., works..lb. .06½- —
Lamp, dom., 1, ctns., c.l., works..lb. .07 - —
l.c.l., works.....lb. .08 - —
2, ctns., c.l., works.....lb. .09 - —
l.c.l., works.....lb. .10 - —
2A, ctns., c.l., works.....lb. .11 - —
l.c.l., works.....lb. .12 - —
3, ctns., c.l., works.....lb. .12 - —
l.c.l., works.....lb. .14 - —
4, ctns., c.l., works.....lb. .15 - —
l.c.l., works.....lb. .16 - —
5, ctns., c.l., works.....lb. .17 - —
l.c.l., works.....lb. .18 - —
6, ctns., c.l., works.....lb. .24 - —
l.c.l., works.....lb. .25 - —
7, ctns., c.l., works.....lb. .54 - —
l.c.l., works.....lb. .55 - —
Mineral, vine type, bbls., l.c.l., f.o.b. works..lb. .0434- —
Vine, A, bbls., works or N. Y., lb. .04½- .05
B, bbls., works or N. Y..lb. .05¾- —
kegs, f.o.b. N. Y.....lb. .06 - —
dms., c.l., frt. alld.....lb. .09½ Nom.
Black dyes are listed under Dyes.
Black Haw root bark, bls.....lb. .40 - .45
Tree bark, bls.....lb. .18 - .19
Black Indian hemp root, bls..lb. .22 - .28
Blanc fixe, dry, by-product, bgs., c.l., works..ton.60.00 - —
l.c.l., works.....ton.67.50 - —
direct process, bgs., c.l., f.o.b. Huntington, W.Va.ton.70.00 - —
bbls., same basis.....ton.75.00 - —
l.c.l., bgs, same basis...ton.75.00 - —
bbls., same basis.....ton.80.00 - —
pulp, 65%%, bbls., c.l., works, ton.40.00 - —
l.c.l., works.....ton.46.50 - —
Bleaching powder, dms., c.l., works..100 lbs. 2.25 - 3.10
l.c.l., works.....100 lbs. 2.50 - 3.35
Blood, dried, dom., 16-16½ ammon., bgs., f.o.b. N. Y., unit-ton. 5.00 - —
high-grade, grd., 16-17 ammon, bulk, f.o.b. Chicago, unit-ton. 5.25 - —
import, bgs., c.i.f. ports, shipt..unit-ton. 4.90 - —
soluble (see Albumen, blood).
Bloodroot, lbs.....lb. .38 - .40
Blue,[2] alkali, toner, bbls., dlvd. N. of Tenn. and N. C., E. of Miss. River, including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis. lb. .85 - .90

Alkali blue toner prices are ½c. higher dlvd. Ala., Fla., Ga., La. (Shreveport, 1½c.), Miss., N. C., S. C., Tenn., Tex. (Dallas, Ft. Worth, 1¼c.; El Paso, 2c.), Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1c. higher dlvd. Pac. Coast; for Denver, Pueblo, Salt Lake City, Wichita, prices are equalized with Chicago.

Bronze, bbls., same basis, contracts..lb. .36 - —
Celestial, bbls.....lb. .10 - .12
Chinese, bbls., same basis, contracts..lb. .36 - —
Cobalt, genuine, 1-kilo pkg..lb. 4.90 - —
Imitation (see Blue, ultramarine).
Copper, phthalocyanin, bbls., f.o.b. works, frt. alld..lb. 3.30 - 3.75
Milori, bbls., same basis, contracts..lb. .36 - —
Molybdated, Victoria, same basis, contracts..lb. 3.15 - —
Peacock, same basis, contracts, lb. .52 - —
Potash, dom., bbls., same basis, contracts..lb. .42 - —
Prussian, bbls., same basis, contracts..lb. .36 - —
Tungstated, peacock, kgs....lb. 4.00 - —
Victoria, kgs.....lb. 3.30 - —
methyl violet, kgs.....lb. 2.10 - —
Ultramarine, dry or pulp, cobalt grades, bbls., works, frt. equald..lb. .22 - .24
jobbing grades, bbls., same basis..lb. .11 - —
regular grades, bbls., same basis..lb. .16 - .27

Blue, ultramarine, dlvd., ex whse., is 1c. higher; Pac. Coast, ex whse., 2c. higher; 100-lb. kgs., 1c. above bbls.; 25-lb. boxes, 5c. above bbls.

Victoria, ink toner, bbls., same basis alkali toner..lb. 1.83 - —
synthetic vehicle, bbls., same basis..lb. 1.93 - —
Blue dyes are listed under Dyes.
Blue flag root, bls.....lb. .15 - .20
Blue mass, USP, cns., tubs....lb. 1.67 - 1.84
powd., bots., cns., dms.....lb. 1.70 - 1.84
Bluestone (see Copper sulphate).
Blue vitriol (see Copper sulphate).
Bone, raw, dom., 4½% ammon., 50% phos., bgs., f.o.b. Chicago..ton.39.00 -40.00
import, bgs., c.i.f. ports..ton.37.50 - —
Meal, steamed, dom., 3% ammon., 50% phos., bgs., f.o.b. Chicago..ton.38.00 -39.00
import, bgs., c.i.f. ports..ton.37.50 - —
phosphate, precip. (see Calcium phosphate dibasic, precip.).
steamed, dom., 1¼% ammon., 60% phos., bgs., f.o.b. Chicago..ton.40.00 -41.00
import, 1% ammon., 65-70% phos., bgs., c.i.f. ports..ton.42.00 - —
Boneset leaves, bls.....lb. .08½- .09
Borage flowers, bls.....lb. .40 - .45
Borax, tech., 99½% gran., bulk, c.l., frt. alld..ton.41.50 - —
bgs., c.l., frt. alld....ton.45.00 - —
ton lots, ex whse....ton.56.00 - —
less than ton lots, ex whse..ton.61.00 - —
bbls., c.l., frt. alld....ton.54.00 - —
ton lots, ex whse....ton.65.00 - —
less than ton lots, ex whse..ton.70.00 - —
powd., bgs., c.l., frt. alld. ton.50.00 - —
ton lots, ex whse....ton.61.00 - —
less than ton lots, ex whse..ton.66.00 - —

DEFENSE MUST BEGIN SOMEWHERE

• Defense, like every other dynamic force, has a beginning — a center at which energy is generated.

In the execution of modern warfare there is no activity so basic as the work of a chemical laboratory.

Chemistry is the beginning of the business of transforming raw materials into explosives, into planes, into ships, into trucks, and into tanks.

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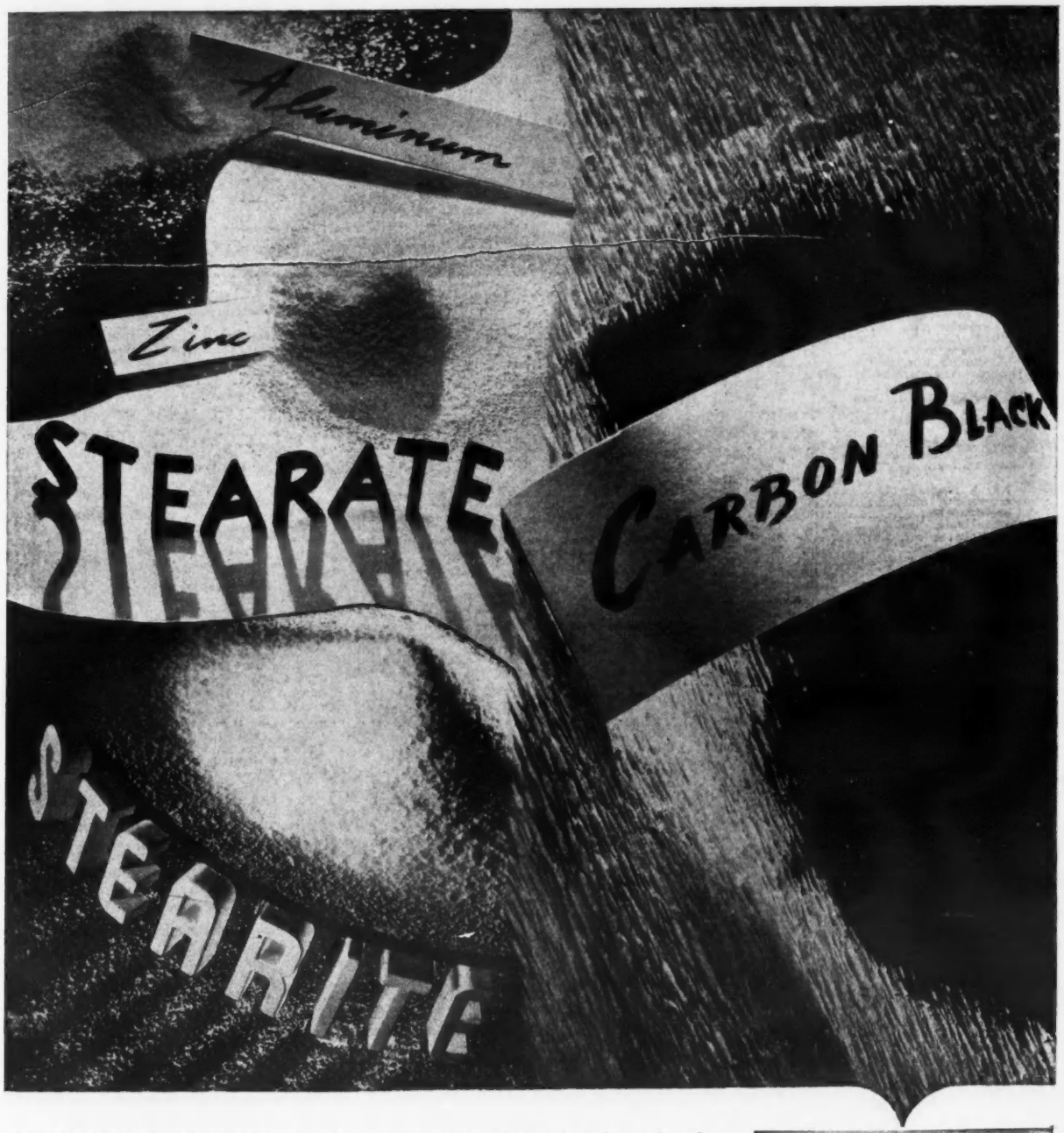
MANUFACTURERS: SODA ASH • CAUSTIC SODA • BICARBONATE OF SODA • CHLORINE • CALCIUM CARBONATE • DRY ICE

Borax, tech., 99½%, powd., bbls., c.l., frt. alld..ton.59.00 - —
ton lots, ex whse....ton.70.00 - —
less than ton lots, ex whse..ton.75.00 - —
USP $15 per ton higher.
Bordeaux mixture, dms., c.l., dealers..lb. .11 - —
l.c.l., dealers, dms..lb. .11½- —
Bordeaux mixture prices are works or whse. basis, frt. alld. to dest. in lots of 96 lbs. and over, no trucking or freight allowances for works or warehouse pickups.
Brasilwood extract (see Hypernic).
Brimstone (see Sulphur).
Bromine, purif., cs., 1,000 lbs., frt. alld. E. of Rockies..lb. .25 - .30
single pkg., same basis..lb. .30 - .35
Bromoform, USP, 100-lb. lots, bots..lb. 1.50 - —
cbys. .....lb. 1.42 - —
Bromstyrol .....lb. 3.75 - 4.00
Bronze powder, aluminum (see A).
Gold, litho, cns., dms., over 10 lbs..lb. .60 - .65
moulding, cns., dms., over 10 lbs..lb. .80 - 1.00
printing ink, cns., dms., over 10 lbs..lb. .85 - 1.20
radiator, cns., dms., over 10 lbs..lb. .45 - .50
Broomtops, bls.....lb. .15 - .16
Brown,[3] **iron oxide, pure precip.**, cks., f.o.b. N.Y..lb. .12 - —
Metallic, iron oxide, bbls., wks. lb. .02¾- —
paper bgs., c.l., works.....lb. .0260- —
Sap, crystals, dom., works...lb. .12 - —
powdered .....lb. .13 - —
Sienna, burnt, American, bbls., f.o.b. works..lb. .03½- .06
Italian, Amer. replacement type, bbls., f.o.b. works. lb. .08¾- .10¾
raw, American, bbls., f.o.b. works..lb. .03¼- .05¾
Italian, Amer. replacement type, bbls., f.o.b. works. lb. .08 - .10
Umber, American, bbls., works. lb. .03¾- —
Turkey-type, bbls., l.c.l., f.o.b. Bethlehem, Easton, Pa., N.Y...lb. .04¾- —
St. Louis.....lb. .05¼- —
ex car, Los Angeles....lb. .05¾- —
Portland, San Francisco, Seattle..lb. .05¼- —
ex whse., Los Angeles. lb. .05¾- —
Portland, San Francisco, Seattle..lb. .05¾- —
Boston .....lb. .04¾- —
Chicago, Indianapolis, New Orleans..lb. .05¼- —
Kansas City.....lb. .05¾- —
Minneapolis .....lb. .0535- —
Pittsburgh .....lb. .05 - —
Vandyke, regular, bbls., l.c.l., works..lb. .09 - —
special .....lb. .12 - —
Brucine, 100 oz., cns.....oz. .35 - —
Sulphate, 100 oz., cns.....oz. .30 - —
Bryonia root, bls.....lb. 1.25 - 1.30
Buchu leaves, bls.....lb. .74 - .75
Buckthorn bark, true, bls....lb. .80 - .85
cut and sifted, bbls.....lb. .85 - .90
Berries, bgs.....lb. 1.10 - 1.15
Burdock root, bls.....lb. .40 - .45
Burgundy pitch, dom., dms...lb. .06 - .06½
Butternut bark, bls.....lb. .07 - .08
Butyl acetate[2], norm., dms., c.l., frt. alld..lb. .14½- .168
l.c.l., frt. alld.....lb. .15 - .173
tanks, frt. alld.....lb. .13½- .158
secondary, dms., c.l., frt. pd. E. of Miss. R..lb. .09½- —
dms., l.c.l., same terms.lb. .10 - —
tanks, same terms.....lb. .08½- —
Alcohol (see Alcohol).
Aldehyde, dms., c.l., works..lb. .15½- —
l.c.l., works.....lb. .16½- .17¼
tanks, works.....lb. .14½- —
Carbinol, secondary, l.c.l., dms., works..lb. .60 - —
Chloride, normal, dms., c.l., works..lb. .25 - —
l.c.l. .....lb. .28 - —
Ether (see under Ether).
Lactate, dms.....lb. .26½- —
Propionate, dms., dlvd.....lb. .16½- .17
tanks .....lb. .15½- —
Stearate, dms.....lb. .31 - —
Butyric ether, bots.....gal. 6.50 - 6.96
cns., works.....lb. .65 - .70
dms., frt. alld., Met. N.Y...lb. .60 - —
Butane[5], **industrial grade, tanks**, group 3..gal. .02½- —

C

Cadmium, bromide, 25-lb. jars, 50 lbs. or more..lb. 1.65 - 1.66
single jars.....lb. 1.70 - —
5-lb. bots.....lb. 1.84 - 1.91
Iodide, 5-lb. bots.....lb. 4.22 - —
25-lb. cans.....lb. 4.09 - —
Lithopone (see Yellow).
Metal, [2,4,5], pat., shapes, cs., dlvd..lb. .95 - —
ingots or sticks.....lb. .90 - —
Red (see Red).
Selenide (see Red).
Sulphite (see Yellow).
Caffeine, 10,000 lbs. or more, 100 lb. dms..lb. 2.60 - —
25 lb. dms.....lb. 2.63 - —
10 lb. cns.....lb. 2.65 - —
2,000 lbs. or more, 100-lb. dms. lb. 2.65 - —
25 lb. dms.....lb. 2.68 - —
10 lb. cns.....lb. 2.70 - —
1,000 lbs. or more, 100-lb. dms., lb. 2.70 - —
25 lb. dms.....lb. 2.73 - —
10 lb. cns.....lb. 2.75 - —
100 lbs. or more, 100-lb. dms.lb. 2.80 - —
25 lb. dms.....lb. 2.83 - —
10 lb. cns.....lb. 2.85 - —
less than 100 lbs., 10-lb. cns., lb. 3.15 - —
Citrated, bots.....lb. 2.30 Nom.
Hydrobromide, bots.....lb. 5.29 - 5.37
Calabar beans, bgs.....lb. .25 - .30
Calamus root, peeled, N. F., cs., lb. No stocks
bleached, bls.....lb. No stocks
dom., natural, bls.....lb. .40 - .45
Calcium acetate, bgs., dlvd., 100 lbs. 3.00 - 4.00
Arsenate, bgs., c.l.....lb. .06½- .07½
l.c.l. .....lb. .06¾- .07¾
Calcium arsenate prices are works or whse. basis, frt. alld. to dest. in lots of 90 lbs. or over; no frt. or truck allowances for plant or whse. pick-up.
Bromide, 100 lbs., works, frt. equald..lb. .65 - —
50 lbs., works.....lb. .67 - —
25 lbs., works.....lb. .70 - —
Carbide, dms., c.l., dlvd. 100 lbs. 4.75 - —
l.c.l., f.o.b. warehouse. 100 lbs. 4.85 - —
Carbonate (see Chalk and Whiting).
Calcium chloride, flake, paper bgs., 77-80%, cl., dlvd..ton.18.50 -35.00
l.c.l., 15 tons, dlvd....ton.21.50 -25.50
5 ton lots.....ton.28.50 -41.00
liquor, basis 40%, tanks, wks., ton. 7.50 - —
solid, dom., 73-75%, dms., c.l., dlvd..ton.18.00 -34.50
l.c.l., 15 ton, dlvd....ton.21.45 -25.45
5 ton lots.....ton.28.45 -40.95
Calcium chloride c.l. prices for flake in burlap paper-lined bags, $2.50 per ton over paper bags, and drums $3.50 per ton over paper bags.
Gluconate, USP, gran., 150-lb. bbls..lb. .52 - —
dms. .....lb. .57 - .59
cns. .....lb. .70 - —
Powd., 2c. per lb. lower.
Glycerophosphate, fib. dms.. 1,000-lb. lots..lb. 1.25 - —
100-lb. lots.....lb. 1.40 - —
cns., 25 lbs.....lb. 1.65 - —
Hypophosphite, cns.....lb. .62 - .65
Iodide, bots., jars.....lb. 4.04 - 4.19
Lactate, USP, bbls., 200 lbs..lb. .27 - .28
Mandelate, dense, dms.....lb. 2.05 - 2.15
fluffy, dms.....lb. 2.05 - 2.15
Nitrate, fertilizer grade, bgs., to fert. mfrs., ex vessel Atlantic or Gulf ports..ton. No prices
tech., bbls., ton lots, works, lb. .12½- .13
Palmitate, bbls.....lb. .28 - .29
Phosphate, dibasic, precip., 35-40% P_2O_5, bgs., c.l.f. Atlantic ports, shipt..unit-ton. No prices
Calcium, phosphate, feeding grade, bgs., f.o.b. works..ton.75.00 - —
food grade, f.o.b. works, 10 bbls. and over..lb. .07 - —
5 to 9 bbls., same basis. lb. .09 - —
1 to 4 bbls., same basis.. lb. .10 - —
medicinal, bbls.....lb. .11½- .12
dms. .....lb. .12½- .18
monobasic, cryst., bgs., c.l., works, frt. equald..lb. .05¾- —
5 tons and over, bgs., same basis..lb. .06 - —
less than 5 tons, same basis lb. .06½- —
tribasic, c.l., bbls., works. lb. .0635- —
l.c.l., bbls.....lb. .0705- .0785
Resinate, precip., bbls., 1 ton. lb. .13 - —
smaller lots.....lb. .14 - —
Stearate, precip., bbls., ctns., ton..lb. .26 - —
smaller quantities.....lb. .27 - —
Sulphate (see Gypsum).
Sulphide, 70%, CaS, bgs., c.l., works..ton.46.00 - —
80%, CaS, bgs., c.l., works.ton.51.00 - —
luminous, dom., tins, works. 100 lbs. 1.25 - —
Sulphocarbolate, 200-lb. bbls..lb. .48 - —
Calendula flowers, bls.....lb. .85 - .90
Calomel, bbls., fib. dms., kgs., 50 lbs. or more..lb. 2.95 - —
Camphor, natural, powd., cs....lb. 1.60 - 1.65
slabs, cs.....lb. 1.60 - 1.65
tablets, tin.....lb. 1.70 - 1.75
synth., dom., tech., bbls., contract, 2,000 lbs. or more, works..lb. .42 - —
smaller lots, works..lb. .47 - —
USP, or import, gran., powd., bbls., 2,000-lb. lots..lb. .69 - —
1,000-lb. lots.....lb. .70 - —
smaller lots.....lb. .71 - —
tablets, 2,000-lb. lots....lb. .82 - —
1,000-lb. lots.....lb. .83 - —
smaller lots.....lb. .84 - —
Monobromate, bulk, 100-lb. lots. lb. 2.40 - —
25 to 50-lb. lots.....lb. 2.50 - —
Canada balsam (see Fir, balsam).
Canary seed, Argentine, bgs...lb. .03¾- .04
Morocco, bgs.....lb. .03¼- .03½
Canella alba bark, bls.....lb. .45 - .50
Cantharides, Chinese, cs.....lb. 1.50 - 1.60
powd., bxs.....lb. 1.75 - 1.85
Russian, cs.....lb. 4.50 Nom.
powd., bxs.....lb. 5.50 Nom.
Capsicum (see Pepper, red).
Caraway, Dutch, bgs.....lb. 1.15 - 1.20
Carbazole, 95%, dms., ton lots, works..lb. .70 - —
smaller quantities, works..lb. .80 - —
98%, dms., ton lots, works...lb. .75 - —
smaller quantities, works..lb. .85 - —



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- ☐ Witcarb
- ☐ Witco Aluminum Stearate
- ☐ Witco Zinc Stearate

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Carbinol—Dyes

Carbinol, butyl, norm. (see Amyl alcohol, normal).
Diethyl, l.c.l., works..lb. .60 - —
Dimethylethyl, l.c.l., works..lb. .60 - —
Isobutyl, c.l., dms., frt. alld..lb. .225 - —
l.c.l., same basis..lb. .235 - —
tanks, same basis..lb. .215 - —

Carbon bisulphide, 55 gal., dms., c.l., frt. alld. E. of Miss. R., N. of Ohio R..lb. .05 - —
l.c.l., same basis..lb. .05¾- —
5-gal. dms., c.l., same basis, lb. .07 - .07½
l.c.l., same basis..lb. .08 - .08½

Dioxide, cyls..lb. .06 - .06

Tetrachloride,[6] Zone 1, 52½-gal. dms., c.l., frt. alld..gal. .72 - —
l.c.l., frt. alld..gal. .80 - —
5 or 10-gal. dms., c.l., frt. alld..gal. .97 - —
l.c.l., frt. alld..gal. 1.07 - —

Zone 2, 52½-gal. dms., c.l., frt. alld..gal. .80 - —
l.c.l., frt. alld..gal. .87 - —
5 or 10-gal. dms., c.l., frt. alld..gal. 1.04 - —
l.c.l., frt. alld..gal. 1.14 - —

Zone 3, 52½-gal. dms., c.l., frt. alld..gal. .94 - —
l.c.l., frt. alld..gal. 1.00 - —
5 or 10-gal. dms., c.l., frt. alld..gal. 1.17 - —
l.c.l., frt. alld..gal. 1.27 - —

Zone 4, 52½-gal. dms., c.l.gal. .83 - —
l.c.l. ..gal. .90 - —
5 or 10-gal. dms., c.l....gal. 1.07 - —
l.c.l. ..gal. 1.17 - —

All prices on carbon tetrachloride are frt. alld. with the exception of Zone 4, in which case the prices indicated are based on f.o.b. cars, L. A. Cal.; S. F. Cal.; Portland, Ore., and Seattle, Wash. All packages are inclusive and not returnable. Zone 1 includes the following States:—Me., N. H., Vt., Mass., Ct., R. I., N. Y., N. J., Pa., Md., Del., Va., W.Va., N. C., Tenn., O., Ind., Mich., Ill., Wis., Minn., Ia., Mo., also the river towns of Burlington, Ia., and Kansas City, Kan. Zone 2 includes N. D., S. D., Neb., Kan., Okla., Ark., La., Miss., Ala., Ga., S. C. and Fla. Zone 3 includes that portion of Montana east of Billings and the states of Wyoming, Colo., N. M. and Texas. Zone 4 includes Wash., Idaho, Montana, Ore., Cal., Nev., Utah and Arizona.

Cardamom, bleached, cs..lb. 1.60 - 1.70
decorticated, cs..lb. 1.30 - 1.40
green, Ceylon, bgs..lb. .96 - .98

Carob bean flour (see Gum, Locust bean).

Carvol, bots..lb. 22.50 -23.50
Cascara sagrada bark, bulk..lb. .20 - .21

Case-hardening mixtures, 30% lump, dms., l.c.l..lb. .09 - —

Casein, dom., 20-30 mesh, bgs., c.l., divd..lb. .31 - —
5 tons, works..lb. .31¼ - —
smaller lots, works..lb. .31½ - —
80-100 mesh, c.l., divd....lb. .31½ - —
5 tons, works..lb. .31⅝ - —
smaller lots, works..lb. .32 - —
Import, Argent., 20-30 mesh, bgs., c.l., c.i.f..lb. .27 - —
80-100 mesh, bgs., c.l., c.i.f..lb. .27½ - —
French, 30 mesh, bgs., c.l., duty paid..lb. No prices
New Zealand, 20-30 mesh., c.l., bgs., duty paid..lb. No prices

Cassia, Batavia, No. 1, thin quill, bls..lb. .36 - .37
No. 1, regular, bls..lb. .33 - .34
srortstick, bls..lb. .33 - .34
broken, bls..lb. .30 - .31
China, buds, bgs..lb. .32 - .34
Rolls, select, bls..lb. .31 - .32
broken, extra, bls..lb. .32 - .33
Saigon, No. 1, 4-10-4, bls....lb. .64 - .66
10-6-2, bls..lb. .65 - .66
all thin, bls..lb. .68 - .69

Cassia fistula, bskts..lb. .18 - .19

Castoreum, nat., cns..lb. 12.50 -15.00
Synth, bots..lb. 19.00 - —

Castor beans, Brazilian, ship't. c.&f., N.Y., long ton. 77.00 -78.00

Oil (see Oil, castor).
Pomace, dom., 6½% ammon., bgs., c.l., works..ton. 15.50 -16.00
Import, bgs., c.i.f. ports, shipment..ton. No prices

Celery seed, French, bgs..lb. .90 - .95
Indian..lb. .55 - .56

Celluloid scrap (see Pyroxylin scrap).

Cellulose, acetate, flake, gran., frt. alld..lb. .30 - —
Acetate-butyrate, high (36.5% butyryl content), 100-lb. ctn., 5,000 lbs. and up, frt. alld. lb. .45 - —
1,000-4,900 lbs., frt. alld..lb. .46 - —
100-900 lbs., frt. alld...lb. .47 - —
smaller pkgs., works....lb. .48 - —
medium (15.5 or 17.0%), 100-lb. ctns., 5,000 lbs. and up, frt. alld..lb. .43 - —
1,000-4,900 lbs., frt. alld..lb. .44 - —
100-900 lbs., frt. alld....lb. .45 - —
smaller pkgs., works....lb. .46 - —
Acetate-propionate, high (31.5% propionly content), 100-lbs. ctn., 5,000 lbs. and up, frt. alld..lb. .45 - —
1,000-4,900 lbs., frt. alld..lb. .46 - —
100-900 lbs., frt. alld....lb. .47 - —
smaller pkgs. works....lb. .48 - —
Triacetate, flake, frt. alld....lb. .30 - —

Cerium hydrate, dms., works..lb. .60 - —
oxalate, USP, bbls., works..lb. .35 - —
kgs., works..lb. .37 - —

Chalk, precip., papermakers, bgs., c.l., works..ton. 32.50 - —
rubbermakers, bgs., c.l., works, ton. 30.00 - —
other industries, and paints, bgs., c.l., works..ton. 40.00 - —
drugs, dentifrices and cosmetics, c.l., spot..lb. .02½- —

Chamomile flowers, Hungarian, type, cs..lb. .80 - .85
Roman, bls..lb. 3.25 Nom.

Charcoal, softwood, gran., bgs., c.l., divd., Ala., Del., Ga., Ky., Md., Miss., N. J., N. Y., N. C., S. C., Tenn., Va., W. Va..ton. 35.40 - —
Colo..ton. 32.00 - —
Conn., Me., Mass., N. H., R. I., Vt..ton. 35.80 - —
Ill. (except river point), Minn., Neb., Wis..ton. 27.00 - —
Indiana..ton. 31.00 - —
Ill. (river points), Mo., Okla., Tex. (except El Paso), Ia..ton. 25.00 - —
Kansas, El Paso, Tex., ton. 26.00 - —
Michigan..ton. 32.80 - —
Ohio..ton. 32.80 - —
Penn..ton. 34.80 - —
Utah..ton. 36.00 - —
Willow, powd., bbls..lb. .09 - .07

Chestnut extract, clarif., 25% tan., bbls., c.l., works..lb. .0275- —
tanks, works..lb. .0225- —

Chillies (see Pepper, red).

China clay, dom., dry-grd., air-float, 99.5%, 300 mesh, bgs., c.l., works..ton. 9.50 - —
l.c.l., works....ton. 10.00 -16.00
bulk, c.l., works..ton. 7.60 - —
200 mesh, bgs., c.l., works..ton. 8.50 - —
l.c.l., works....ton. 9.50 -15.50
wet-grd., silk-bolt, 99.9%, 325 mesh, bulk, c.l., works..ton. 9.50 - —
paper bgs., c.l., works, ton. 12.50 - —

Import, white, lump, bulk, c.l., ex dock, Balto., Boston, Norfolk Phila..ton. 18.60 -23.00
powd., cks., l.c.l., ex whse., ton. 45.00 - —

Chloral hydrate, jars, 1,000 lbs..lb. .95 - 1.04
500 lbs..lb. .96 - 1.07
100 lbs..lb. 1.00 - 1.09
25 lbs..lb. 1.02 - 1.11
1-10 lbs..lb. 1.07 - 1.14
dms., 1,000 lbs..lb. .92 - —
500 lbs..lb. .95 - —
100 lbs..lb. .97 - —

Chlorinated rubber, standard 100 lbs. or more, works, lb. .32 - —
smaller lots..lb. .35 - —

Chlorine,[8,9] liq., cyls., c.l., divd., N.Y..lb. .05¼- —
contracts, divd., N. Y....lb. .05¼- —
l.c.l., divd. N. Y....lb. .07¼- —

tanks, single units, works, frt. equald..100 lbs. 1.75 - —
multiple unit, 3 or over, works, frt. equald..100 lbs. 2.00 - —
2, works, frt. equald., 100 lbs. 2.50 - —
1, works frt. equald., 100 lbs. 3.00 - —

Chloroform, tech., 650-lb. dms..lb. .20 - —
100 lb. dms..lb. .22 - —
50-lb. dms..lb. .23 - —
USP, 650-lb. dms..lb. .30 - —
100-lb. dms..lb. .32 - —
50-lb. dms..lb. .33 - —

Chlorpicrin, com'l, 180-lb. cyls., frt. alld..lb. .80 - —
100-lb. cyls., frt. alld....lb. .85 - —
25-lb. cyls., works....lb. 1.00 - 1.15
1-lb. bot., case 2 works, lb. 1.25 - —

Chrome acetate, powd., 24%, bbls., lb. .22 - —
solut., 8½%, cs., bbls....lb. .07¾- .08½
Cake, bulk, c.l., works....ton. 16.00 - —
Green (see Green, chrome).
Oxide (see Green, chrome).
Sulphate, pearls, dms., 100 lbs., lb. .40 - —
powd., dms., 100 lbs....lb. .45 - —
scale, dms., 100 lbs....lb. .45 - —
Trioxide (see Acid, chromic).
Yellow (see Yellow, chrome).

Chrysarobin, 5-lb. bot..lb. 5.00 - —

Cinchona bark, quill, USP, 10 in medium, cs..lb. .85 - .90
20 in., thick, cs..lb. .85 - .90
20 in., medium, cs..lb. .85 - .90
USP, broken quill, red, bgs..lb. .19 - .20
yellow, bgs..lb. .19 - .20

Cinchonidine, small crys., cns., 100 ozs..oz. .89 - —
Sulphate, N.F., cans., 100 ozs.oz. .53 - —

Cinchonidine buyers must pay a surcharge of 13½c. per oz. to cover present war-risk insurance, higher ocean freight rates and additional expenses over the cost of usual business. Changes in these controlling factors will be reflected in the surcharge invoiced.

Cinchonine, small crys., cns., 100 ozs..oz. .62 - —
large cryst., cns., 100 ozs.oz. .66 - —
Sulphate, N.F., cns., 100 ozs.oz. .42 - —

Cinchonine buyers must pay a surcharge of 13½c. per oz. to cover present war-risk insurance, higher ocean freight rates and other expenses over the cost of usual business. Changes in these controlling factors will be reflected in the surcharge invoiced.

Cinchophen, USP, 25-lb. fib. dms., lb. 3.55 - 3.60
1 and 5-lb. bots..lb. 3.70 - 3.80
100 lbs., dms..lb. 3.50 - —

Cinnamic alcohol (see Alcohol, cinnamic).
Aldehyde, 99-100% pure, cbys., cns..lb. 1.25 - 1.60

Cinnamon, Ceylon, 2 bls..lb. .29 - .30
3 bls..lb. .28 - .29

Citral, bots., cns..lb. 4.50 - 5.50
Citrine ointment, jars..lb. .98 - 1.00
Citronella, bots., dms..lb. 1.50 - 2.25
Citronellol, bots., dms..lb. 1.75 - 2.00
Clove, Amboyna, bgs..lb. .30 - .31
Zanzibar..lb. .18 - .18¼
Clover tops, red, bgs..lb. .35 - .40
dom., bgs..lb. .27 - .29

Coaltar, coal-gas, crude, bbls., c.l., works..bbls. 7.50 - 7.75
l.c.l., works..bbl. 8.25 - 8.50
tanks, works..gal. .07½- .09
refd., bbls., c.l., works....bbl. 8.00 - 8.25
l.c.l., works....bbl. 8.75 - 9.00
tanks, works..gal. .08½- .10
water-gas, crude, dms., c.l., works..dm. 7.50 - —
l.c.l., works..dm. 8.25 - —
l.c.l., works..dm. 8.75 - —
refd., dms., c.l., works..dm. 8.00 - —

Cobalt acetate,[7] bbls., kgs., dlvd. lb. .83¾- —
Carbonate,[7] powd., bgs., works, lb. 1.58 - —
Chloride, kgs., works..lb. .87½- —
Hydrate,[7] bbls..lb. 2.04 - —
Linoleate, paste, 5% dms...lb. .31 - —
Linoleate, solid, 8½%, dms..lb. .42 - —
Oleate, bbls..lb. .25 Nom.
Oxide,[7] black, kgs..lb. 1.84 - —
Resinate, fused A, bbls....lb. .13½- —
1 %, cobalt oxide, bbls....lb. .13 - —
2 %, cobalt oxide, bbls....lb. .14 - —
3½%, cobalt oxide, bbls....lb. .17½- —
precip., dms., dlvd..lb. .34 - —
Sulphate,[7] dms..lb. .65 - —

Cocaine, hydrochloride, 100 ozs., cns..oz. 9.75 - —

Cochineal, gray, bgs..lb. .37 - .38
Teneriffe, silver, bgs..lb. .38 - .39

Cocoa butter,[1] bulk, f.o.b., shipping point..lb. .25½- —

Cocillana bark, bgs..lb. .20 - .21

Codeine, cns., 100 ozs..oz. 11.70 - —
Hydrochloride, cns., 100 ozs.oz. 10.50 - —
Phosphate, cns., 100 ozs....oz. 9.00 - —
Sulphate, cns., 100 ozs....oz. 9.50 - —

Codliver oil (see Oil, codliver).

Cohosh, black, root, bls..lb. .07 - .08
Blue root bls..lb. .07 - .08

Colchicine, bots., cns..oz. 58.00 -63.00

Colchicum seed, bgs..lb. 6.00 - 6.25

Collodion, USP, dms., 325 lbs..lb. .19½- .20½
cns., 25 lbs..lb. .21 - .31
flexible, USP, dms., 325 lbs..lb. .17 - —
cns., 25 lbs..lb. .21 - .22

Colocynth pulp, bls..lb. .90 - .95
Colombo root, bls..lb. .20 - .22
Coltsfoot leaves, bgs..lb. .74 - .75

Condurango bark, bgs..lb. .09½- .19

Conium leaves, bls..lb. .30 - .32

Copaiba, balsam, Para, cns....lb. .32 - .33
S. A., USP, cns..lb. .34 - .35

Copper acetate, normal, bbls., divd..lb. .24 - —
smaller containers, divd..lb. .26 - —
Carbonate, 52-54%, bbls....lb. .18 - .20½
Chloride, anhyd., bbls....lb. .19½- —
cryst..lb. .13½- .14¼
Cyanide, tech., bbls..lb. .34 - .38
Iodide, bots..lb. 5.15 - 5.19
Metal,[1,2,5] electrolytic..lb. .12 - .12½
Nitrate tech., cryst., bbls....lb. .16 - .18¼
Oleate, precip., bbls..lb. .20 - —
Oxide, black, bbls., tons, works, lb. .19½- .21
Red, com'l, kgs., f.o.b. N. Y., lb. .20 - .22
Resinate, precip., bbls..lb. .15 - .16
Sulphate, 99%, cryst., bbls., c.l., f.o.b. works..100 lbs. 5.15 - 5.50
l.c.l., 18-50 bbls., same basis, 100 lbs. 5.30 - 5.65
6-15 bbls., same basis, 100 lbs. 5.40 - 5.75
1-5 bbls., same basis, 100 lbs. 5.65 - 6.00
monohydrated, dms., c.l., dealers, f.o.b. works..100 lbs. 9.20 - —
l.c.l., dealers..100 lbs. 10.20 - —
Copperas, cryst., gran., bgs., c.l., works..ton. 17.00 - —
bbls., c.l., works....ton. 20.00 - —
l.c.l., 25 or over, works, 100 lbs. 1.55 - —
1-4, works..100 lbs. 2.00 - —
bulk, c.l., works..ton. 14.00 - —
Copra, Coast, ship..lb. .05½- —
Coriander, bgs..lb. .13½- —
bleached, bgs..lb. .13 - .13½
Indian, bgs..lb. .10½- .11
Corn silk, bls..lb. .20 - .21
Corn sugar, tanners', chipped, bgs., c.l., dlvd..100 lbs. 4.05 - —
slabs, bbls., c.l....100 lbs. 3.41 - —
solid, bbls., c.l....100 lbs. 3.53 - —
Syrup, 42°, bbls., c.l..100 lbs. 3.52 - —
43°, bbls., c.l....100 lbs. 3.57 - —
Corrosive sublimate, cryst., dms., 50 lbs. or more..lb. 2.39 - —
gran., powd., dms., 50 lbs. or more..lb. 2.24 - —
Cottonroot bark, bls..lb. .15 - .16
Cottonseed, hull ash, 32-36% potash, bgs., dlvd., unit-ton. 1.00 - —
meal, 8%, Southeast, mills..ton. 42.50 -43.00
Coumarin, 5 lbs. or more 25-lb. cns..lb. 2.75 - —
5-lb. cns..lb. 2.85 - —
1-lb. cns..lb. 2.90 - —
1-oz. cns..lb. 3.25 - —
less than 5 dms., cns..lb. 4.15 - 4.65
Cramp bark, genuine, bls....lb. .30 - .65
so-called, bls..lb. .06 - .07
Cranesbill root, bls..lb. .12 - .13
Cream of tartar, gran. or powd., bbls., 5,000 lbs., one shipm't, lb. .57½- —
smaller lots, bbls..lb. .58 - —
kgs..lb. .58½- —
Creosote, beechwood, cbys., dms. lbs. .80 - .85
bots..lb. 1.00 - 1.04
hardwood, USP, bots..lb. .60 - .77
Pine, dms..gal. .28 - —
Carbonate, bots, cbys..lb. 2.10 - 2.39
Oil, crude, tanks, works....gal. .15½- —
Coaltar, solution, tanks, works, gal. .141 - —
refd., bbls., l.c.l., works..gal. .26 - —
tanks, works..gal. .18 - .18¼
Cresol,[6,7] USP, dms., c.l., works, lb. .11 - .11¼
l.c.l., same basis..lb. .11½- .11⅝
special resin grade, dms., c.l., works..lb. .10 - .10¼
l.c.l., same basis..lb. .10½- .10⅝
Crotonaldehyde, 97%, 55 and 110 gal., l.c.l., works..lb. .15 - —
5 and 10-gal. dms., works..lb. .18 - —
Cryolite, syn., c.l., frt. alld. E. of Miss. River..lb. .08½- —
l.c.l., works..lb. .09¼- —
natural, c.l..100 lbs. 8.75 - —
l.c.l. ..100 lbs. 9.25 - —
Cube root, powd., 5% rotenone, bbls., f.o.b. N.Y.C..lb. .38 - .40
4% rotenone prices are 3c. per lb. less.
Cubeb berries, XX, bgs..lb. .55 - .60
powd., cs..lb. .60 - .65
Culver's root, bls..lb. .24 - .28
Cumin seed, Morocco, bgs....lb. .18 - .18¼
Cyprus, bgs..lb. .18 - .18¼
Indian, bgs..lb. .16¾- .17¼
Persian, bgs..lb. .17¼- .17¾
Cutch, Borneo, extract, solid, contract, f.o.b. N.Y., duty paid..lb. .05½- —

Cyanamide, 22% N, pulv., bgs., dlvd., contracts..unit-ton. No prices
Cyanide-chloride, mixture, 45%, gran., dms..lb. .10¾- —
lump, dms..lb. .09¾- —
75%, gran., dms..lb. .15 - —

Cyclohexane, 98-100%, dms., wks. lb. .16 - —
Cyclohexanol, 98-100%, dms., wks. lb. .23 - —
Cyclohexanone, 98-100%, dms., works..lb. .32 - —
Cyclopropane, USP, cyls., dlvd. gal. .27 - —

D

Damiana leaves, bls..lb. .15 - .16
Dandelion root, bls..lb. .48 - .49
Decanol, normal, tech., 300 lbs., dms., dlvd..lb. .35 - —
Deertongue leaves, bls..lb. .15 - .17
Degras,[5] common, dom., bbls..lb. .10½- .12½
neutral, dom., bbls..lb. .24 - .25
Derris root, powd., 5% rotenone, bbls., f.o.b. N.Y..lb. .38 - .40
4% rotenone prices are 3c. per lb. less.
Derris, extract, 30% rotenone, bulk, cns..lb. 4.25 - 4.50
Dextrin, British gum, c.l., f.o.b. Chicago..100 lbs. 4.25 - —
l.c.l., f.o.b. Chicago..100 lbs. 4.35 - —
Corn, canary, pgs., c.l., f.o.b. Chicago..100 lbs. 4.00 - —
l.c.l., f.o.b. Chicago..100 lbs. 4.80 - —
white, bgs., c.l., f.o.b. Chicago..100 lbs. 3.95 - —
l.c.l., f.o.b. Chicago..100 lbs. 4.15 - —
Potato, bgs., dom., c.l....lb. .09¼- —
l.c.l., bgs..lb. .10 - .10½
Diacetone (see under Alcohol).
Diacetyl, bots..lb 9.50 -11.00
Diamyl ether (See Amyl Ether).
Phthalate, dms., c.l., dlvd...lb. .22 - —
l.c.l., dlvd..lb. .22½- —
tanks, dlvd..lb. .21 - —
Diamyl sulphide, l.c.l., dms., works..lb. .25 - —
Diamylamine, dms., c.l., works, lb. .50 - —
l.c.l., works..lb. .53 - —
Diamylene, dms., c.l., works..lb. .105 - —
l.c.l., works..lb. .112 - —
tanks, works..lb. .095 - —

Diamylnaphthalene, dms., l.c.l., works..lb. .17 - —
Diamylphenol (2, 4), dms., c.l., works..lb. .18 - —
l.c.l. ..lb. .21 - —

Diatomaceous earth, dom., natural, bgs., c.l., f.o.b. Pacific cst..ton. 22.00 -25.00
l.c.l., ex whse..ton. 45.00 - —
purified, bgs., c.l., f.o.b. Atlantic seaboard..ton. 35.00 -39.00
l.c.l., ex whse..ton. 85.00 -90.00
chemically pure, bgs., c.l., f.o.b. Atlantic seaboard..lb. .07 - —
l.c.l., ex whse..lb. .10 - .16
Import, Algerian, bgs., c.l., c.i.f. ton. No prices
Mexican, white, bgs., c.l., c.i.f. lb. .02 - .03
l.c.l. ..lb. .04 - .06

Dibutylamine, dms., c.l., works, lb. .50 - —
l.c.l. ..lb. .53 - —
tanks, works..lb. .48 - —

Dibutyl ether (see Ether, butyl).
Phthalate,[2] dms., c.l., dlvd..lb. .21 - .23
l.c.l., dlvd..lb. .21½- .23½
tanks, dlvd..lb. .20 - .22
cns., works..lb. .23¼- .25½
Sebacate, dms., works..lb. .45 - .47
Tartrate, dom., dms..lb. .87 - —

Dicalcium phosphate (see Calcium phosphate dibasic).

Dichlorethyl ether, dms., c.l., works..lb. .15 - —
l.c.l. ..lb. .16 - —
tanks ..lb. .14 - —

Dichloropentanes, dms., c.l., works..lb. .037 - —
l.c.l. ..lb. .04½- —
tanks ..lb. .03 - —

Diethanolamine, dms., c.l., works, lb. .23½- —
l.c.l., works..lb. .24½- —
tanks, works..lb. .22½- —

Diethylamine, dms., l.c.l., works, lb. .70 - —

Diethylamino ethanol, l.c.l., dms., works, frt. alld. E. of Miss. river, l.c.l., dms..lb. .75 - —

Diethylanilin, dms..lb. .40 - —

Diethyl carbonate, com'l, dms.. lb. .25 - —
refd., 99%, dms..lb. .35 - —
Oxalate, dms., l.c.l., divd....lb. .28 - —
Phthalate, dms., c.l., dlvd..lb. .21½- —
l.c.l. ..lb. .22 - —
tanks ..lb. .20¾- —
Sulphate, dms., c.l., works...lb. .13 - —
l.c.l., works..lb. .14 - —
tanks ..lb. .12 - —

Diethyleneglycol, dms., c.l., works, lb. .14 - —
l.c.l., works..lb. .15½- —
Monobutylether, dms., works..lb. .22½- .24½
Monoethylether, dms., c.l., works..lb. .14½- —
l.c.l., works..lb. .15½- —
tanks, works..lb. .13½- —

Digitalis leaves, dms..lb. .50 - .55
Diglycol, laurate, c.l..lb. .16 - —
Oleate, light, bbls., c.l..lb. .17 - —
Stearate, bbls., c.l..lb. .22 - —
Di-isobutyl ketone, dms., works..lb. .19 - —
Dillseed, cleaned, bgs..lb. .06½- .09¾
Dimethyl phthalate, dms., c.l., divd..lb. .20 - —
l.c.l., divd..lb. .20¼- —
tanks, divd..lb. .19 - —
Dimethylamine, dms., c.l., divd..lb. .85 - —
l.c.l., divd..lb. .90 - —
Dimethylanilin, dms., c.l..lb. .23 - —
l.c.l., dms..lb. .24 - —

Dinitrobenzene, bbls., 80° min..lb. .13 - —
Dinitrochlorobenzene, dms..lb. .14 - —
Dinitronaphthalene, kgs..lb. .35 - .38
Dinitrophenol, bbls..lb. .22 - —
Dinitrotoluene, dms..lb. .18 - —
oily, dms..lb. .18 - —
Diorthotoluoiguanidin, dms., 2,000 lbs. or over, divd..lb. .44 - —
600-1,950 lbs., divd..lb. .46 - —
150-450 lbs., divd..lb. .47 - —
Dioxan, dms., c.l., frt. alld....lb. .20 - —
l.c.l., same basis..lb. .21 - —
tanks, same basis..lb. .19 - —

Dip oil (see Tar acid oil).

Dipentene, dms..gal. .59 - .61
tanks ..gal. .51 - —
dest., dist., dms..gal. .55 - .58
tanks ..gal. .48 - —

Diphenyl, bbls., c.l., works....lb. .16 - .20
l.c.l., works..lb. .43 - .45
Oxide, perfume grade, dms..lb. .43 - .45
cns. ..lb. .48 - .50

Diphenylamine, bbls..lb. .25 - —
Diphenylguanidin, dms., 2,000 lbs. or over, divd..lb. .35 - —
600-1,950 lbs., divd..lb. .36 - —
150-450 lbs., divd..lb. .37 - —

Dimethylethyl carbinol (see Carbinol).

Divi-Divi, Colombian..ton. 52.00 - —
Venezuelan..ton. .55 - —

Doggrass root, imp. cut, NF, bls. lb. .90 - 1.00
domestic, bls..lb. .36 - .37
Dogwood bark, Jamaica, bls...lb. .08 - .09
Dovers powder, USP, cns.....lb. 2.75 - 2.80
Dragon's blood, reeds, cs.....lb. .95 - 1.00

Dyes, coaltar (certified colors) for foods, drugs and cosmetics:—
Blue, FD&C blue, No. 1, cns..lb. 13.50 - —
FD&C blue, No. 2, cns....lb. 13.50 - —
Green FD&C green, No. 2, cns. lb. 17.50 - —
FD&C green, No. 3, cns....lb. 27.50 - —
FD&C green, No. 1, cns....lb. 13.50 - —
Orange, FD&C orange, No. 1, cns..lb. 2.90 - —
FD&C orange, No. 2, cns..lb. 3.65 - —
Red, FD&C red, No. 1, cns..lb. 6.00 - —
FD&C red, No. 2, cns....lb. 3.15 - —
FD&C red, No. 3, cns....lb. 17.50 - —
FD&C red, No. 4, cns....lb. 5.75 - —
FD&C red, No. 32, cns....lb. 4.15 - —
Yellow, FD&C yellow, No. 1, cns..lb. 3.50 - —
FD&C yellow, No. 3, cns..lb. 2.65 - —
FD&C yellow, No. 4, cns..lb. 2.65 - —
FD&C yellow, No. 5, cns..lb. 3.15 - —
FD&C yellow, No. 6, cns..lb. 3.15 - —

Dyes, coaltar (certified colors), for drugs and cosmetics:—
Black, D&C black, No. 1....lb. 8.35 - —
Blue, D&C blue, No. 6....lb. 13.50 - —
Brown, D&C brown, No. 1, cns., lb. 12.85 - —
Green, D&C green, No. 5, cns., lb. 12.35 - —
D&C green, No. 6, cns....lb. 12.35 - —
Orange, D&C orange, No. 3, cns..lb. 8.35 - —
D&C orange, No. 4, cns....lb. 15.35 - —
D&C orange, No. 10, cns...lb. 15.85 - —
D&C orange, No. 11, cns...lb. 17.35 - —
Red, D&C red, No. 5.....lb. 6.00 - —
D&C red, No. 17.....lb. 8.35 - —
D&C red, No. 18.....lb. 18.35 - —
D&C red, No. 19, cns.....lb. 15.35 - —
D&C red, No. 22, cns.....lb. 8.35 - —
D&C red, No. 33.....lb. 13.35 - —
D&C red, No. 37, cns.....lb. 12.35 - —
Yellow, D&C yellow, No. 7, cns..lb. 8.35 - —
D&C yellow, No. 8, cns....lb. 8.35 - —
D&C yellow, No. 11.....lb. 10.35 - —

Dyes, coaltar (certified colors), for external use drugs and cosmetics:—

Blue, Ext. D&C blue, No. 1, cns..lb.12.35 - —
Green, Ext. D&C green, No. 1, cns..lb.12.35 - —
Red, Ext. D&C red, No. 1, cns..lb.10.35 - —
Ext. D&C red, No. 3.....lb.21.85 - —
Ext. D&C red, No. 8.....lb. 7.85 - —
Ext. D&C red, No. 10, cns..lb.12.35 - —
Ext. D&C red, No. 13, cns..lb.12.35 - —
Yellow, Ext. D&C yellow No. 1, cns..lb. 8.85 - —

Dyes, coaltar, for general uses (numbers are those of Colour index scale):—

36 Chrome yellow 2G....lb. .65 - .70
40 Chrome yellow R.....lb. .50 - 1.00
53 Victoria violet.....lb. .80 - 1.00
165 Lake red C.....lb. .70 - .80
170 Fast red A.....lb. .56 - .60
180 Fast red VR.....lb. 1.50 - 1.60
189 Lake red R, paste....lb. .85 - .90
189 Lake red R, powd....lb. 3.00 - 3.10
Sulphur tan.....lb. .30 - .50
202 Chrome blue black U.lb. .32 - .40
204 Chrome black A.....lb. 1.75 - 2.00
208 Fast red blue R.....lb. .75 - 2.00
216 Chrome red B.....lb. 1.75 - 2.00
262 Cloth red 2B.....lb. .60 - .80
289 Fast cyanin 5R.....lb. .90 - 1.00
299 Chrome black F.....lb. .60 - .65
307 Fast cyanin black B.lb. .80 - .85
326 Direct cast scarlet....lb. 2.00 - 2.25
304 Paper yellow.....lb. .85 - .90
365 Chrysophenin G.....lb. .58 - .70
394 Direct violet N.....lb. 1.25 - 1.35
382 Direct scarlet B.....lb. 1.50 - 1.75
387 Direct violet B.....lb. 1.00 - 1.30
401 Developed black BHN, lb. .45 - .60
406 Direct blue 2B.....lb. .25 - .30
415 Direct orange R.....lb. .60 - .70
419 Direct fast red F.....lb. .75 - .85
420 Direct brown M.....lb. 1.00 - 1.10
448 Benzo purpurin 4B...lb. .54 - .56
495 Benzo purpurin 10B..lb. .40 - .50
502 Direct azurin G.....lb. .75 - .80
512 Direct blue RD.....lb. .80 - 1.00
518 Direct pure blue 6B..lb. 1.10 - 1.25
520 Direct pure blue.....lb. .50 - 1.00
529 Direct fast black, FF.lb. .55 - 1.00
581 Direct black EW.....lb. .25 - .50
582 Direct black RX.....lb. .35 - .45
592 Direct green B.....lb. .75 - .80
594 Direct green G.....lb. 1.00 - 1.05
596 Direct brown 3GO....lb. .85 - 1.00
620 Direct yellow R.....lb. 1.25 - 1.50
698 Acid violet.....lb. 1.00 - 3.00
812 Primulin .....lb. .50 - .52
814 Direct fast yellow....lb. 2.00 - 2.25
845 Nigrosin (water soluble), lb. .35 - .50
1177 Indigo, 20 p.c. paste..lb. .15 - .18
Benzo fast black L...lb. .90 - 1.00
Sulphur black.....lb. .20 - .25
Sulphur blue.....lb. .40 - 1.00
Sulphur brown.....lb. .25 - .50
Sulphur maroon.....lb. .40 - —
Sulphur olive.....lb. .25 - .54
Sulphur yellow.....lb. .30 - .50
Zambesi black.....lb. .75 - .80

Dyes, coaltar, for stains, oil soluble (prices in barrels of 250 lbs. each; lots of 25 lbs. to a barrel, 3c. per lb. higher; f.o.b. sellers' works or warehouse).

Black:—
865 Nigrosin derivatives..lb. .38 - .62
Blue:—
1075 Alizarin astrol base..lb.15.00 - —
1078 Alizarin cyanin green base..lb. 6.00 - —
Brown:—
Brown .....lb. 1.15 - —
Green:—
1078 Alizarin cyanin green.lb. 5.00 - —
Green .....lb. .75 - —
Orange:—
24 Sudan I.....lb. .75 - —
Red shade.....lb. .75 - —
Red:—
75 Sudan II.....lb. 1.05 - —
258 Sudan IV.....lb. .95 - —
749 Rhodamine B (oil pink), lb. 2.50 - —
1080 Anthraquinone violet base..lb. 6.00 - —
680 Oil violet.....lb. .50 - —
Yellow:—
15 Amidoazobenzene yellow..lb. .90 - —
17 Amidoazotoluene yellow, lb. .75 - —
61 Yellow OB.....lb. 1.40 - 2.00

Dyes, coaltar for stains, water-soluble (prices in barrels of 250 lbs. each; lots of 25 lbs. to a barrel, 3c. per lb. higher, f.o.b. sellers' works or warehouse).

Black:—
864 Nigrosin.....lb. .38 - .47
Blue:—
860 Indulin.....lb. .60 - .70
Brown:—
331 Bismarck brown.....lb. 1.50 - —
Green:—
647 Malachite green base.lb. 2.00 - —
Orange:—
20 Chrysoldin G.....lb. .95 - —
21 Chrysoldin R.....lb. .90 - —
Red:—
677 Fuchsin, magenta, base, lb. 7.25 - —
749 Rhodamine B.....lb. 4.75 - —
Yellow:—
67 Amidoazotoluene yellow, lb. .75 - —
655 Auramine.....lb. 2.00 - —
800 Chinolin yellow SS...lb. 2.00 - —
Violet:—
680 Methyl violet base....lb. .85 - —

Dyes, coaltar, for stains, spirit-soluble (prices in barrels of 250 lbs. each; lots of 25 lbs. to a barrel, 3c. per lb. higher, f.o.b. sellers' works or warehouse).

Black:—
246 Naphthol blue black S.lb. .50 - —
873 Methylene gray.....lb. 1.50 - —
Blue:—
714 Patent blue A.....lb. 1.05 - 1.10
729 Victoria blue B.....lb. 1.85 - —
861 Indulin.....lb. .87 - —
909 New blue R.....lb. 1.30 - —
922 Methylene blue.....lb. 1.00 - —
1054 Alizarin saphirol B...lb. 1.90 - —
1180 Indigotin IA.....lb. .85 - —
Brown:—
234 Resorcin brown Y....lb. .65 - —
235 Resorcin dark brown R, lb. .66 - —
231 Bismarck brown G....lb. .47 - .62
332 Bismarck brown R...lb. .47 - .62
796 Phosphin.....lb. 4.65 - —
Green:—
5 Naphthol green B.....lb. 1.00 - —
657 Malachite green.....lb. 1.35 - —
662 Brilliant green.....lb. 2.00 - —
666 Guinea green B.....lb. 1.15 - —
737 Wool green S.....lb. .58 - —
924 Methylene green B...lb. 1.55 - —
1078 Alizarin cyanin green.lb. 2.25 - —

Dyes, coaltar, for stains, spirit-soluble (prices in barrels of 250 lbs. each; lots of 25 lbs. to a barrel, 3c. per lb. higher, f.o.b. sellers' works or warehouse).

Orange:—
10 Chrysoldin G.....lb. .44 - —
21 Chrysoldin R.....lb. .41 - —
27 Orange G.....lb. .50 - —
151 Orange Y.....lb. .31 - .33
161 Orange R.....lb. .34 - —
31 Amidonaphthol red G.lb. .42 - —
37 Amidonaphthol red 6B, lb. .68 - —
79 Popceau R.....lb. .48 - —
88 Fast red B.....lb. 1.05 - —
176 Fast red A.....lb. .54 - —
179 Azorubin .....lb. .60 - .62
183 Crocein scarlet 3BX..lb. .72 - .75
185 Cochineal red A.....lb. .60 - —
252 Brilliant crosein M...lb. .68 - —
677 Fuchsin .....lb. 2.10 - —
749 Rhodamine B.....lb. 3.50 - —
752 Rhodamine 6G.....lb. 4.50 - —
768 Eosin G.....lb. 1.50 - —
841 Safra in .....lb. 1.45 - —
Violet:—
680 Methyl violet B.....lb. .75 - —
681 Crystal violet C.....lb. 1.75 - —
695 Acid violet 4BN.....lb. .88 - —
Yellow:—
10 Naphthol yellow S....lb. .88 -
138 Metanil yellow.....lb. .56 - .58
656 Fast light yellow.....lb. 1.25 - —
639 Xylene light yellow...lb. 1.15 - —
640 Tartarzin .....lb. .80 - —
655 Auramine .....lb. 1.27 - —

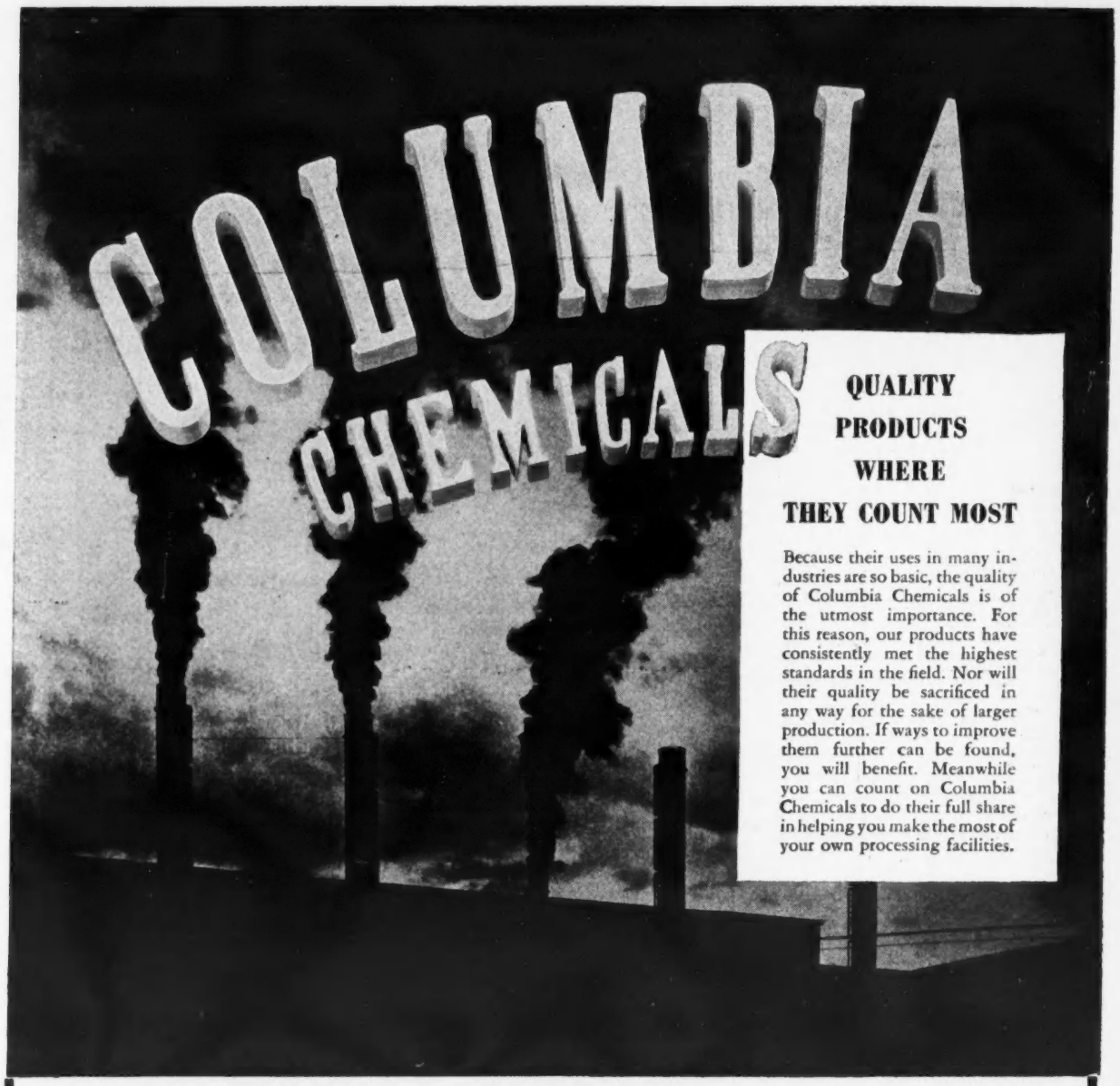
Dyes, natural (see name of article).

E

Echinacea root, bls.....lb. .18 - .19
Egg albumen (see Albumen).
yolk, dried, dom., bbls.....lb. 1.00 - 1.05
imported .....lb. .95 - 1.00
Elder flowers, bright, bls.....lb. .85 - 1.00
Elecampane root, bls.....lb. .17 - .22
Elm bark, grinding, bls.....lb. .11 - .12
powd., bbls., bxs.....lb. .19 - .20
select, bndls. .....lb .19 - .21
Emetine hydrochloride, bots..oz.26.00 -34.00
Ephedra, bls. .....lb. .12 - .15
Ephedrine, synth., USP, heminydrate, bots., 100 ozs. or more..oz. .65 - —
anhyd., bots., 100 ozs. or more..oz. .68 - —
hydrochloride, tins, 100 ozs. or more..oz. .50 - —
Sulphate, cryst., tins, 100 ozs. or more..oz. .48 - —
natural, USP, anhydrous, bots. oz. 1.15 - 1.65
hydrochloride or sulphate, tins..oz. .95 - 1.45
Epsom salt, tech., bgs....100 lbs. 1.80 - —
bbls. .....100 lbs. 1.90 - —
Epsom salt prices on technical and USP are on the basis of freight equalized with Bellmawr, Carteret, N. J., Chicago, Cincinnati, Cleveland, Houston, New Orleans, New York.
USP, cryst., dom., bgs., c.l., 100 lbs. 2.00 - —
l.c.l., 5,000 lbs., 1 withdrawal..100 lbs. 2.25 - —
smaller lots.....100 lbs. 2.50 - —

Dyes—Ethyl Acetate

Epsom salt, USP, cryst., dom., bbls., c.l..100 lbs 2.10 - —
l.c.l., 5,000 lbs., 1 withdrawal..100 lbs. 2.35 - —
smaller lots.....100 lbs. 2.60 - —
kgs., c.l. .....100 lbs. 2.35 - —
l.c.l., 5,000 lbs., 1 withdrawal..100 lbs. 2.60 - —
smaller lots.....100 lbs. 2.85 - —
dried, bgs., l.c.l.....lb. .08 - .09
Ergot, USP, cns., dms.....lb. 1.70 - 1.80
Eserine, bots.....oz. No prices
Salicylate, bots .....oz.41.00 -48.00
Sulphate, bots.....oz.41.00 -48.00
Ether, acetic (see Ethyl acetate,
Butyl, l.c.l., dlvd.....lb. .30 - —
Ethyl (see Ether, sulphuric).
Nitrous, conc., bots., 100 lbs., lb. .73 - —
Sulphuric, conc., 310-lb. dms.lb. .11 - —
27-lb. dms. .....lb. .16 - —
Synth., dms., c.l., works....lb. .10 - —
l.c.l., works.....lb. .11 - —
tanks .....lb. .08 - —
USP, anaesthesia, hospitals, 1-lb. cns..lb. .52 - .55
Amyl (see Amyl, ether):—
Ethyl acetate,[2] 85-90%, dms., c.l., frt. alld..lb. .12 - .13
l.c.l., frt. alld.....lb. .12½ - .13½
tanks, frt. alld.....lb. .11 - .12
95-98%, dms., c.l., frt. alld.lb. .12¼ - .13¼
l.c.l., frt. alld.....lb. .12⅝ - .13⅝
tanks, frt. alld.....lb. .11¾ - .12¼
NF, 380-lb. dms.....lb. .15½ - —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Columbia Chemical Division
30 ROCKEFELLER PLAZA
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Ethyl Acetoacet.—Glycerin

Ethyl, acetoacetate, dms., c.l., works	lb.	.37½- —
l.c.l., frt. alld	lb.	.38 - —
Benzoate, bots.	lb.	1.00 - 1.25
Bromide, tech., dms.	lb.	.50 - .55
Caproate, cns.	lb.	10.00 -11.00
Chloride, dms.	lb.	.18 - .20
Cinnamate, cns.	lb.	3.50 - 3.75
Formate, cns., dms.	lb.	.27½- —
Iodide, bots.	lb.	3.50 - 3.60
Lactate, 55-gal. dms., works,	lb.	.33½- —
5-gal. dms., works	lb.	.37½- .39½
Oenanthate, dms.	lb.	.75 - 1.25
Oxalate, dms., frt. alld	lb.	.33 - —
Oxyhydrate, bots	gal.	7.50 - 8.00
Silicate, l.c.l., dms., works	lb.	.77 - —
Vanillin, 25-lb. lots, cns	lb.	4.75 - 5.25
5-lb. lots, cns	lb.	4.80 - 5.30
1-lb. lots, cns	lb.	4.95 - 5.40
Ethylcellulose, std. cans, 5,000 lbs. or more, frt. alld.	**lb.**	**.45 - —**
less than 5,000 lbs., same basis.	**lb.**	**.47 - —**
Ethylene, dichloride,[3] dms., c.l., works, E. of Rockies, frt. alld	**lb.**	**.0742- —**
West of Rockies, same basis	**lb.**	**.0792- —**
l.c.l., works, E. of Rockies, frt. alld	lb.	.0795- —
West of Rockies, same basis	lb.	.0841- —
Ethyleneglycol, dms., c.l.	**lb.**	**.14½- —**
l.c.l.	lb.	.15¼- .18½
tanks	lb.	.13½- —
Monobutylether, dms., c.l., wks.	**lb.**	**.16½- —**
l.c.l., works	lb.	.17½- .20¼
tanks, works	lb.	.15½- —
Monoethylether, dms., c.l., wks.,	**lb.**	**.14½- —**
l.c.l., works	lb.	.15¼- .16½
tanks, works	lb.	.13½- —
Monoethylether, acetate, dms., c.l., works	**lb.**	**.11½- —**
l.c.l., dms	lb.	.12½- .15½
tanks, works	lb.	.10½- —
Monomethylether, dms., c.l., works	**lb.**	**.15½- —**
l.c.l., works	lb.	.16½- —
tanks, works	lb.	.14½- —
Ethylidinanilin, dms.	**lb.**	**.45 - .47½**
Eucalyptol, cns., dms.	**lb.**	**1.50 - 1.60**
Eucalyptus, leaves, bls.	**lb.**	**.10 - .11**
Eugenol, cns., dms.	**lb.**	**2.40 - 2.50**
Euphorbia, bls.	**lb.**	**.12 - .15**

F

Feldspar, enamel, 100 mesh, bulk, works	**ton.**	**14.00 -17.50**
l.c.l., minimum 2 tons	ton.	17.00 -20.50
glass, 20 mesh, bulk, works.	**ton.**	**9.75 -12.25**
l.c.l., minimum 2 tons	ton.	12.75 -16.25
pottery, bulk, Me., works	ton.	17.00 -19.00
N.C., works	ton.	17.00 -19.00
l.c.l., minimum 2 tons.	ton.	20.00 -22.00
Fennel seed, Argentine, bgs.	**lb.**	**.14 - .14½**
German, large bags	lb.	.20 - .21
Indian, bags	lb.	.11 - .11½
Fenugreek, seed, bgs.	**lb.**	**.10 - .10¼**
Ferric, sulphate, anhyd., c.l., works	**ton.**	**35.00 - —**
l.c.l.	ton.	40.00 - —
Film scrap, colors, dark, cs., 1,000 lbs. or over, works	**lb.**	**.14 - —**
smaller lots, works	lb.	.15 - —
light, cs., 1,000 lbs. or over, works	lb.	.15 - —
smaller lots, works	lb.	.16 - —
water white, cs., 1,000 lbs. or over, works	lb.	.16 - —
smaller lots, works	lb.	.17 - —
Fir balsam, Canada, cns.	**gal.**	**13.50 -15.00**
Oregon, bbls.	gal.	1.25 - 1.35
Fish berries, bgs.	**lb.**	**.26 - .27**
Fish scrap, menhaden, dried, 11-12% ammon., 15% bone phos., bulk, Chesapeak factories, contracts, futures	**unit-ton.**	**4.75 & .10**
meal, bgs., f.o.b. Balto	ton.	75.00 - —
6-7% ammon., 3% phosphor. acid, bulk, Chesapeake Bay factories, contracts	**unit-ton.**	**2.75 & .50**
sardine, Japanese, 11½% ammon., bgs., c.i.f. ports	**ton.**	**No prices**
Flake white, dom., bbls.	**lb.**	**.09 - —**
kegs	lb.	.11 - —
Flaxseed, French, black, bgs.	**lb.**	**.55 - .60**
Indian, blende, bgs.	**lb.**	**.15 - .16**
Fluorspar, dom., No. 1 ground, bulk, 95-98%, f.o.b. mines	**net ton.**	**32.00 -34.00**
washed gravel, 85.5 f.o.b. Ky. and-Ill.-Ky. mines	**net ton.**	**24.00 - —**
No. 2, lump, 85.5 f.o.b. Ky. and Ill. mines	**net ton.**	**24.00 - —**
imported, 85.5, duty paid	**short ton.**	**26.00 - —**
Formaldehyde,[1,2,4,6] bbls., c.l., works	**lb.**	**.0550- .0575**
l.c.l., works	lb.	.06 - .0625
dms., c.l., works	lb.	.0515- .0540
l.c.l., works	lb.	.0565- .0590
tanks	lb.	.04 - .04¼
Formaldehyde prices are under 4¼c. to 9½c. OPA ceiling.		
Fringetree bark, bls.	**lb.**	**.20 - .35**
Fullers earth, dom., powdered, bgs., c.l., f.o.b. Fla., Ga. mines	**ton.**	**8.50 -15.00**
f.o.b. Tex. mines	ton.	12.50 - —
import, Eng., bgs., c.l., dlvd. N.Y.	ton.	30.00 -40.00
Furfural, ref., dms., c.l., works.	**lb.**	**.13 - —**
l.c.l., works	lb.	.17½- .25
tech., dms., contracts, 150,000 lbs.	lb.	.10 - —
tanks, works	lb.	.09 - —
dms., c.l., works	lb.	.12½- —
l.c.l., works	lb.	.15 - .20
Fusel oil, refd., dms., incl., dlvd.,	**lb.**	**.18 - .18½**
Fustic, cryst., bgs., No. 1	**lb.**	**.32 - —**
No. 2	lb.	.30 - —
No. 3	lb.	.28 - —
extract, bbls., No. 1	lb.	.16 - —
No. 2	lb.	.15 - —
No. 3	lb.	.12½- —

G

G salt, bbls.	**lb.**	**.45 - —**
Galangal root, bls.	**lb.**	**.12 - .14**
Gambier, common, cases	lb.	No price
plantation, cases	lb.	.13 Nom.
cubes, Singapore, cases	lb.	.10½- .10¾
extract, bbls.	lb.	.09½- .12
Gasoline[2] at refinery:—		
Bayonne, US motor, tanks, ex tax.	**gal.**	**.08 - .08½**
California (f.o.b. San Francisco), regular, trucks, tax incl.	gal.	.14½- —
Gulf Coast, US motor, 72-74 octane, tanks, ex tax.	gal.	.07½- —
Louisiana-Arkansas, US motor, 72-74 octant, tanks, ex tax.	gal.	.05⅞- .06¼
Oklahoma-Texas, US motor, 72-74 octane, tanks, ex tax.	gal.	.05⅞- .06¼
natural, 18-55, tanks	gal.	.05¼- —
26-70, tanks	gal.	.04¼- —
Gelatin, silver, cs.	**lb.**	**.90 - .97**
Gelsemium root, bls.	**lb.**	**.14 - .15**
Gentian root, bls.	**lb.**	**.60 - .61**
grd., bbls., bxs	lb.	.63 - .64
powd., bbls., bxs	lb.	.65 - .66
Geraniol, 92-96%, cns., dms.	**lb.**	**2.50 - 3.50**
other grades, cns., dms.	lb.	1.50 - 1.90
soap, cns., dms.	lb.	1.10 - 1.50
Ginger, African, No. 1, bgs.	lb.	.42 - .43
Cochin, bgs.	lb.	.38 - .40
Jamaica, bold, bgs.	lb.	.42 - .43
medium, bgs.	lb.	.40 - .42
grinding, bright, bgs.	lb.	.38 - .40
Ginseng root, wild Southern, cs.	**lb.**	**12.00 -13.00**
Glauber's salt, anhyd. (see Soda Sulphate).		
cryst., dom., bgs., bbls., c.l., works	100 lbs.	1.05 - 1.28
5 tons or over, works	100 lbs.	1.15 - 1.35
less than 5 tons, works	100 lbs.	1.25 - 1.45
import, bgs.	100 lbs.	No prices
Glue, bone, calcimine type, 24 millipoise, 36 jelly-grams, bgs., c.l., dlvd. East or Midwest	**lb.**	**.16 Nom.**
l.c.l.	lb.	.17 Nom.
36/58, c.l.	lb.	.15½ Nom.
l.c.l.	lb.	.16½ Nom.
58/82, c.l.	lb.	.17 Nom.
58 millepoise, 82 jellygrams, bgs., l.c.l.	lb.	.18 Nom.
82/108, c.l.	lb.	.17½ Nom.
l.c.l.	lb.	.18½ Nom.
hide, calcimine type, 58 millipoise, 135 jellygrams, bgs., c.l., dlvd. East or Midwest	lb.	.19 Nom.
l.c.l.	lb.	.20 Nom.
60/164, c.l.	lb.	.19½ Nom.
l.c.l.	lb.	.20½ Nom.
67/192, c.l.	lb.	.21½ Nom.
l.c.l.	lb.	.22½ Nom.
75/222, c.l.	lb.	.22½ Nom.
l.c.l.	lb.	.24½ Nom.
68/251, c.l.	lb.	.24½ Nom.
l.c.l.	lb.	.25½ Nom.
92/283, l.c.l.	lb.	.26½ Nom.
l.c.l.	lb.	.28½ Nom.
102/315, c.l.	lb.	.27½ Nom.
l.c.l.	lb.	.28½ Nom.
113/347, c.l.	lb.	.28 Nom.
l.c.l.	lb.	.28 Nom.
125/379, c.l.	lb.	.29 Nom.
l.c.l	lb.	.30 Nom.

Glue prices for barrel packing are ½c. per lb. higher; grinding charges, 20-40 mesh, ½c. per lb.; 60 mesh, 1c. per lb.

Glycerin[1], Zones A and C, C.P., (B.P. 99%), drums, carlots, dlvd.	**lb.**	**.18¾- —**
less carlots, dlvd.	lb.	.19½- —
tanks, dlvd.	lb.	.18½- —
C.P. (USP 95%), drums, carlots, dlvd.	lb.	.18¼- —
less carlots, dlvd.	lb.	.18¾- —
tanks, dlvd.	lb.	.18 - —
dynamite, high gravity, yellow distilled, drums, carlots, dlvd.	lb.	.18¼- —
less carlots, dlvd.	lb.	.18¾- —
tanks, dlvd.	lb.	.18 - —
Soaplye, 80%, drums, carlots, dlvd.	lb.	.11½- —
less carlots, dlvd.	lb.	.11½- —
tanks, dlvd.	lb.	.11½- —
Saponification, 85%, to refiners, drums, c.l., dlvd.	lb.	.12¾- —
less carlots, dlvd.	lb.	.12¾- —
tanks, dlvd.	lb.	.12¾- —
Saponification, 88%, for individual uses, drums, carlots, f.o.b. point of manufacture.	lb.	.13¾- —
Saponification, 88%, for individual uses, dms., less carlots, same basis	lb.	.14¾- —
tanks, same basis	lb.	.12¾- —

Glycerin prices in Zone B are 2c. higher.

Zone A means all points east of and including N. Dak., S. Dak., Neb., Kansas, Omaha, Texas, Laramie County, Wyo.; Col., east of but not including the following counties:—Jackson, Grand, Gilpin, Jefferson,

Stroock & Wittenberg
CORPORATION

Resins
THE COMPLETE LINE

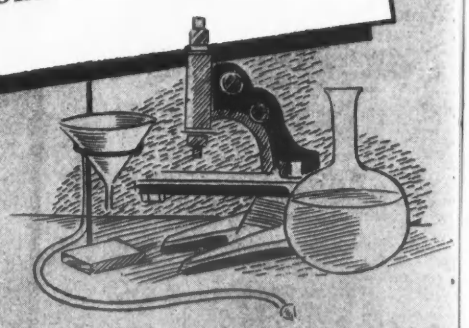
S & W SYNTHETICS

"S & W" ESTER GUM — all types
"AROFENE"* — pure phenolics
"AROCHEM"* — modified types
"CONGO GUM" — raw, fused and esterified
"AROPLAZ"* — alkyds

S & W NATURALS

ACCROIDES
BATU
CONGO
MANILA
BATAVIA DAMARS
SINGAPORE DAMARS
BLACK EAST INDIAS
PALE EAST INDIAS
PONTIANAK
LOBA
ELEMI
KAURI

* Registered U. S. Patent Office



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STROOCK & WITTENBERG CORP. • 60 East 42nd Street • New York City

Douglass, Teller, Fremont, Custer, Huerfano, and Costilla.

Zone B means the territory between Zones A and C, as follows:—Washington, east of and including the following counties:—Okanogan, Chelan, Kittitas, Yakima, Klickitat; Ore., east of and including the following counties:—Hood River, Wasco, Jefferson, Deschutes, Klamatch; Nev., Ariz., New Mex., that part of Col. west of and including those counties mentioned above; Utah, Wyo., excepting Laramie County; Idaho and Mont.

Zone C means the territory west of Zone B.

Glycine, medicinal, bbls., tins	lb.	1.70	- 2.00
Glycol boriborate, dms	lb.	.22	- —
Phthalate, dms.	lb.	.35	- —
Stearate, dms.	lb.	.26	- —
Gold, U.S. purchase price	oz.	35.00	- —
Chloride, acid brown, both	oz.	20.75	-21.00
yellow, bots.	oz.	18.75	-19.00
Gold-soda chloride, photo., bots.,	oz.	13.00	- —
USP IX, bots.	oz.	14.50	-14.75
Gold of pleasure, seed, bgs	lb.	.21	- .22
Goldenseal, root, bls	lb.	3.95	- 4.25
powd., bxs.	lb.	4.15	- 4.50
Grains of Paradise, bgs	lb.	.34	- .35
Graphite, flake (cryst.), 90%, 325 mesh, 50% graphite carbon, bgs., c.l., works	lb.	.07	- —
bbls., c.l., works	lb.	.07½	- —
l.c.l., works	lb.	.07½	- —
65% graphite carbon, bgs., c.l., works	lb.	.02½	- —
l.c.l., works	lb.	.03¼	- —
bbls., c.l., works	lb.	.02¾	- —
80% graphite, carbon, bgs., c.l., works	lb.	.03½	- —
bbls., c.l., works	lb.	.03¾	- —
l.c.l., works	lb.	.04½	- —
Grease,[3] house, loose	lb.	.08½	- —
white, loose	lb.	.09½	- —

Wool (see Adeps lanae and Degras).

Green,[2] chrome, CP, dark, light, medium, blue content up to 4%, bbls., dlvd. N. of Tenn. and N. C., E. of Miss. river, including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis	lb.	.23	- —
6-10%, bbls., same basis	lb.	.24	- —
11-15%, bbls., same basis	lb.	.25	- —
16-20%, bbls., same basis	lb.	.25½	- —
21-25%, bbls., same basis	lb.	.26	- —
26-30%, bbls., same basis	lb.	.26½	- —
31-35%, bbls., same basis	lb.	.27½	- —
36-40%, bbls., same basis	lb.	.29	- —
41-45%, bbls., same basis	lb.	.30½	- —
46-50%, bbls., same basis	lb.	.33	- —

Green, chrome, prices are ½c. higher dlvd. Ala., Fla., Ga., La. (Shreveport, 1¼c.) Miss., N. C., S. C., Tenn., Texas (Dallas, Ft. Worth, 1¼c.; El Paso, 2c.), Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph, ½c. higher dlvd. Pac. Coast; for Denver, Pueblo, Salt Lake City, Wichita prices are equalized wth Chicago.

reduced, CP, color content up to 5%, same basis	lb.	.06½	- —
9-10%, bbls., same basis	lb.	.07¼	- —
11-13%, bbls., same basis	lb.	.07¾	- —
14-16%, bbls., same basis	lb.	.08	- —
17-19%, bbls., same basis	lb.	.08¼	- —
20-21%, bbls., same basis	lb.	.08½	- —
22-23%, bbls., same basis	lb.	.08¾	- —
24-25%, bbls., same basis	lb.	.09	- —
26-27%, bbls., same basis	lb.	.09¼	- —
28-29%, bbls., same basis	lb.	.09¾	- —
30-31%, bbls., same basis	lb.	.10¼	- —
32-33%, bbls., same basis	lb.	.11¾	- —
34-35%, bbls., same basis	lb.	.12¾	- —
36-40%, bbls., same basis	lb.	.14¾	- —
41-45%, bbls., same basis	lb.	.16¾	- —
46-50%, bbls., same basis	lb.	.17¼	- —
51-55%, bbls., same basis	lb.	.17¾	- —
56-60%, bbls., same basis	lb.	.18¼	- —
61-65%, bbls., same basis	lb.	.18¾	- —
66-70%, bbls., same basis	lb.	.19¾	- —
71-75%, bbls., same basis	lb.	.20¾	- —
Oxide, dom., pure, bbls	lb.	.25	- —
ceramic, light shades, bbls., c.l., works	lb.	.25	- —
l.c.l., works	lb.	.27	- —
standard grade, bbls., works	lb.	.23½	- —
Tetrahydroxide, bbls	lb.	.85	- —
Paris (see P).			
Tungstated, brillant, kgs	lb.	3.75	- —
emerald, kgs	lb.	2.60	- —
Verdigris (see V).			
Green dyes are listed under Dyes.			
Grindelia robusta, bls	lb.	.10	- .11
Guaiac resin, cs	lb.	.30	- .35
strained, cs	lb.	.85	- .90
Wood, bls	lb.	.04	- .06
Guaiacol, liq., dms	lb.	1.75	- 2.01
Carbonate, fib. dms., 25 lbs	lb.	2.40	- 2.74
Guarana, powd., cs	lb.	.95	- 1.00
Gum Aloe (see A).			
Ammoniac, tears, cs	lb.	.80	- .85
Arabic, amber sort, cleaned, bgs	lb.	.18	- .20
powd., bbls	lb.	.22	- .24
white, sorts, 1, bgs	lb.	.33	- .35
Asafetida (see A).			
Asphaltum (see A).			
Benzoin, Siam, cs	lb.	2.75	- 3.00
Sumatra, cs	lb.	.45	- .50
Camphor (see C).			
Chicle, prime, 33% moisture, bgs., ton lots	lb.	.40	- .42
Copal, Congo, 1, water white transparent, bgs., c.l., ex dock or ex whse., N. Y. or San Francisco	lb.	.49½	- —

Gum, copal, dammar, elemi, kauri, mastic, sandarac, and yacca gum prices on 80,000 lbs. min. apply to assorted lots of gums as well as one grading packed in bags, unless otherwise specified; l.c.l. prices are ¼c. higher for 10 bgs. or over; ½c. higher for 1-9 bags.

2, water white	lb.	.29½	- —
3, selected pale straw, bold,	lb.	.24½	- —
4, pale straw, bold	lb.	.24	- —
5, pale straw, bold	lb.	.22½	- —
6, pale amber, bold	lb.	.21½	- —
7, pale straw, bold	lb.	.17	- —
8, light amber, bold	lb.	.17	- —
9, medium light amber, bold,	lb.	.13¾	- —
10, rescraped hard amber, bold	lb.	.13¾	- —
11, hard dark amber, bold	lb.	.12¾	- —
12, selected bold sorts	lb.	.11½	- —
13, dark sorts bold	lb.	.09¼	- —
14, selected, fully scraped, ivory	lb.	.23¾	- —
15, ordinary ivory sorts	lb.	.10¾	- —
16, inferior ivory sorts	lb.	.09½	- —
17, pale fingers	lb.	.18¾	- —
18, pale straw nubs	lb.	.19½	- —
19, pale straw nubs	lb.	.16¾	- —
20, hard dark amber nubs,	lb.	.13¼	- —
21, ordinary selected nubs,	lb.	.12¾	- —
22, small mixed nubs	lb.	.10¾	- —
Gum, copal, Congo, 23, dark mixed nubs	lb.	.11⅞	- —
24, No. 1, ivory nubs	lb.	.17¼	- —
26, pale small nubs	lb.	.10¾	- —
27, pale small nubs	lb.	.10¼	- —
28, pale dust	lb.	.06¾	- —
Batu, bold scraped	lb.	.11¼	- —
unscraped	lb.	.10¾	- —
chips	lb.	.07¼	- —
dust	lb.	.07	- —
nubs and chips	lb.	.07¼	- —
black, bold, scraped	lb.	.12½	- —
unscraped	lb.	.08	- —
nubs and chips	lb.	.07¾	- —
Hiroe, Macassar, pale bold,	lb.	.17¾	- —
chips	lb.	.11½	- —
dust	lb.	.07	- —
nubs	lb.	.13¾	- —
Singapore, Rasak, bold	lb.	.22¾	- —
chips	lb.	.12¾	- —
dust	lb.	.07	- —
nubs	lb.	.17¾	- —
Manila, Boeas, amber and dark, bskts.	lb.	.14	- —
light, bskts.	lb.	.15¾	- —
Loba A, bskts.	lb.	.14½	- —
B, bskts.	lb.	.14¼	- —
C, bskts.	lb.	.13¾	- —
CNE, bskts.	lb.	.10½	- —
D, bskts.	lb.	.13¼	- —
DK, bskts.	lb.	.10	- —
dust, bskts.	lb.	.07¾	- —
Sambas and white split chips, bskts.	lb.	.15⅝	- —
Gum, copal, Singapore, dust, bskts.	lb.	.07⅞	- —
Spirit-soluble, CBB, bskts.	lb.	.13½	- —
DBB, bskts.	lb.	.12¼	- —
MA, bskts.	lb.	.10¼	- —
MB, bskts.	lb.	.09⅝	- —
WS, bskts.	lb.	.12¼	- —
Philippine, Manila, amber sorts, bskts.	lb.	.10⅝	- —
chips, pale, bskts.	lb.	.13½	- —
pale, small, bskts.	lb.	.11⅞	- —
extra pale, sorts, bskts.	lb.	.13¼	- —
nubs, bskts.	lb.	.14¼	- —
scraped, bskts.	lb.	.15½	- —
seeds and dust, bskts.	lb.	.09⅝	- —
Pontianak, bold, genuine, bgs.	lb.	.22¾	- —
mixed, bgs	lb.	.17⅞	- —
split, bgs	lb.	.19⅝	- —
chips, bgs	lb.	.14½	- —
nubs, bgs	lb.	.18⅝	- —
Dammar, Batavia, A, cs, same basis as copal	lb.	.35¾	- —
A/C, cs	lb.	.31¼	- —
A/D, cs	lb.	.28¾	- —
A/E, cs	lb.	.25⅝	- —
B, cs	lb.	.24⅞	- —
C, cs	lb.	.28⅝	- —
D, cs	lb.	.25⅝	- —
dust, cs	lb.	.13⅝	- —
E, cs	lb.	.18⅝	- —
F, cs	lb.	.13⅝	- —

Glycine—Gum, Ester

Gum, dammar, Singapore, 1, cs.,	lb.	.30⅝	- —
2, cs	lb.	.25⅝	- —
3, cs	lb.	.12⅝	- —
chips, cs	lb.	.23⅛	- —
dust, cs	lb.	.13	- —
seeds, cs	lb.	.17⅝	- —
Elemi, cns., same basis as copal	lb.	.08¾	- —
Ester, ordinary, c.l., dms., contract, dlvd. New Eng., N. Y., N. J., Pa., Va., N. C., Ky., Ohio, Ind., Mich., Wis. and Ill.	lb.	.08½	- .09⅛
Mont., Idaho, Wyo., Nev., Utah, Col., Ariz., N. Mex. and Western Tex.	lb.	.09	- .10
Pacific Coast (water shipt.)	lb.	.08½	- .10
Other points	lb.	.08⅝	- .10⅛

For delivery of 3,000 pounds, prices are ¼c. per pound higher than the above in each case; for delivery of smaller lots, prices are ½c. per pound higher in each case. Spot prices are ½c. per pound higher.

Euphorbium, cs	lb.	.50	- .55
Galbanum, cs	lb.	1.60	- 1.65
Gamboge, pipe, cs	lb.	.95	- 1.00
powd., bbls	lb.	1.06	- 1.10

THERE IS HARDLY a manufacturer, scarcely any type of business, that is not feeling the effects of our national policy of all out for defense.

The pharmaceutical business is no exception—either from the standpoint of the producer of basic chemicals, like Dow—or of the manufacturers of special pharmaceutical products.

The need is for materials of every kind—from lumber and metals, paper and textiles, to every class of chemicals and medicines. All are involved in this stupendous program. Like all other industrial organizations, Dow is bending every effort to fulfill the demands made upon it and is glad to work with you for America and our national defense.

DOW PHARMACEUTICAL PRODUCTS INCLUDE:

Acetanilid, U.S.P.
Acetphenetidin, U.S.P.
Acetyl Salicylic Acid, U.S.P.
Acetyl Salicylic Acid, Granulation with Starch
Ammonium Bromide, U.S.P.
Ammonium Salicylate, U.S.P.
Antipyrene, U.S.P.
Benzoic Acid, U.S.P.
Bromoform, U.S.P., IX
Calcium Bromide, U.S.P.
Camphor, Monobromated, N.F.
Carbon Tetrachloride, C.P.
Chloroform, U.S.P.
Epsom Salt, U.S.P., Recrystallized
Ethyl Chloride, U.S.P.
Ferric Chloride, Crystals, U.S.P., X
Ferric Chloride Solution, U.S.P.
Glycine, Medicinal
Hydrobromic Acid, U.S.P. IX Quality
Iodine
Lithium Bromide, N.F.
Magnesium Salicylate
Magnesium Sulphate, Desiccated
Methyl Salicylate, U.S.P.
Phenol, U.S.P.
Potassium Bromide, U.S.P.
Potassium Iodide, U.S.P.
Salicylic Acid, U.S.P.
Salol, U.S.P.
Sodium Acetate, U.S.P.
Sodium Benzoate, U.S.P.
Sodium Bromide, U.S.P.
Sodium Salicylate, U.S.P.
Strontium Bromide, N.F.
Strontium Salicylate, N.F.
Tetrachlorethylene, Purified
2,4,6-Tribromphenol
Trichloracetic Acid, U.S.P.

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New York City, St. Louis, Chicago, San Francisco, Los Angeles, Seattle, Houston

DOW

Gum, Ghatti—Litharge

Gum, ghatti, soluble, bgs.....lb. .11 - .15
superior, bgs.....lb. .09 - .11
Gualac (see Gualac resins).
Karaya, bbls., bxs., dms....lb. .14 - .33
Kauri, brown, XXX, cs., c.l.lb. .60 - —
BX, cs., c.l., same basis..lb. .38 - —
B1, cs., c.l., same basis..lb. .28 - —
B2, cs., c.l., same basis..lb. .24 - —
B3, cs., c.l., same basis..lb. .18½- —
80%, chips, cs., c.l., same basis..lb. .15½- —
pale, XXX, cs., same basis.lb. .61 - —
1, cs., c.l., same basis....lb. .41 - —
2, cs., c.l., same basis....lb. .24 - —
3, cs., c.l., same basis....lb. .17¾- —
Kino, tins.....lb. No stocks
Locust bean, powd., bbls....lb. 1.10 - 1.15
Mastic, cs.....lb. 3.25 - 3.30
Myrrh, USP, cs.....lb. .60- .65
Olibanum, siftings, cs.....lb. .09 - .10
tears, cs.....lb. .20 - .35
Opium (see O).
Rosin (see R).
Sandarac, cks.....lb. 1.00 - 1.10
Scammony, cs.....lb. 1.10 - 1.25
Talha, bgs.....lb. .08 - .09
Thus, bbls.....280 lbs.16.50 - —
Tragacanth, Alleppo, 1 cs....lb. 3.50 - 3.60
2 cs.....lb. 2.90 - 3.00
3 cs.....lb. 1.10 - 1.20
Yucca, bgs.....lb. .06½- .07¾
Gypsum, Keene's cement, paper bgs., c.l., f.o.b. Acme, Tex., frt. equald..ton.22.45 - —
Medicine Lodge, Kan., frt. equald..ton.17.00 - —
Harlem River, N. Y., frt. equald..ton.27.65 - —
New Brigton, N.Y.; frt. equald..ton.27.65 - —
Southard, Oklahoma, frt. equald..ton.17.00 - —
Sweetwater, Texas, frt. equald..ton.21.45 - —
plaster of paris, paper bgs., f.o.b. Blue Rapids, Kans., frt. equald..ton.12.50 - —
Acme, Tex., frt. equald.ton.12.50 - —
Harlem River, N. Y., frt. equald..ton.13.00 - —
Medicine Lodge, Kans., frt. equald..ton.12.50 - —
New Brighton, N. Y., frt. equald..ton.13.00 - —
Southard, Oklahoma, frt. equald..ton.12.50 - —
Sweetwater, Texas, frt. equald..ton.12.50 - —
Gypsum, stucco, paper bgs., c.l., f.o.b. Acme, Tex.; Akron, N.Y.; Blue Rapids, Kansas; Clarence Center, N.Y.; Fort Dodge, Ia.; Grand Rapids, Mich.; Gypsum, O.; Harlem River, N. Y.; National City, Mich.; New Brighton, N. Y.; Plasterco, Va.; Portsmouth, N. H.; Roton, Tex.; Saltville, Va.; Southard, Okla.; Sweetwater, Tex.; frt. equald.. ton. 8.00 - —
Terra Alba, dom., paper bgs., c.l., f.o.b. New Brighton, N.Y.; Southard, Okla..ton.12.00 - —
Harlem River, N.Y..ton.12.00 - —
import, bgs., ex dock....ton. No prices

H

Hawthorn berries, bgs.....lb. .65 - 1.25
Heliotropin, cryst., cns.....lb. 4.00 - 4.10
Hellebore root, write, powd., bbls., lb. .18 - .19
Helonias root, bls.....lb. .60 - .61
Hematine, cryst., bgs., No. 1..lb. .34 - —
No. 2..lb. .30 - —
No. 3..lb. .28 - —
No. 4..lb. .26 - —
No. 5..lb. .24 - —
paste, bxs, No. 1.....lb. .14½- —
No. 2.....lb. .13½- —
No. 3.....lb. .12½- —
Hemlock bark extract, 25%, tan, c.l., bbls., works..lb. .03½ Nom.
l.c.l., bbls., works.....lb. .03¾ Nom.
tanks, works.....lb. .03 Nom.
Hempseed, Manchur, bgs.....lb. .16 - .16½
Henbane leaves, bbls.....lb. 3.25 - 3.30
Henna leaves, bls.....lb. .25 - .26
powd., bbls., bxs.....lb. .30 - .31
Heptanes,[3] 56°-100°C, industrial grade, dms., c.l., Group 3..gal. .12½- —
l.c.l., Group 3.....bal. .19 - —
tankcars, Group 3.....gal. .10 - —
laboratory grade, dms., c.l., Group 3..gal. .16 - —
l.c.l., Group 3.....gal. .29 - —
10 gal., Group 3.....gal. .55 - —
77°-115°C, industrial grade, dms., c.l., Group 3..gal. .13 - —
l.c.l., Group 3.....gal. .19 - —
tankcars, Group 3.....gal. .10½- —
laboratory grade, dms., c.l., Group 3..gal. .16 - —
l.c.l., Group 3.....gal. .29 - —
10 gal., Group 3.....gal. .55 - —
Hexaldehyde, normal, dms., c.l., works..lb. 1.10 - —
Hexalin (see Cyclohexanol).
Hexamethylenetetramine,[2,5,6] tech., dms., 1,500 lbs. or more, shipment, f.o.b. Perth Amboy or N.Y.C..lb. .32 - —
100 to 1,350 lbs., shipments, same basis..lb. .33 - —
USP, dms., 500 lbs. or more, shipments, same basis..lb. .38 - —
fib. ctns., same basis.....lb. .40 - —
Hexanes,[3] 60°-70°C, industrial grade, dms., c.l., Group 3..gal. .13½- —
l.c.l., Group 3.....gal. .19 - —
tankcars, Group 3.....gal. .11 - —
laboratory grads, dms., c.l., Group 3..gal. .16 - —
l.c.l., Group 3.....gal. .29 - —
10 gal., Group 3.....gal. .55 - —
Hexanol, dms., l.c.l., works...lb. .25 - —
Homatropine hydrobromide, 25 oz., bots..oz.37.50 -42.00
Hoofmeal, 17-18% ammon., bulk, f.o.b. Chicago..unit. 3.00 - 3.05
Hops, N.F., bls.....lb. .20 - .21
Horehound, bls.....lb. .13 - .15
Hydrangea root, bls.....lb. .09 - .10
Hydrastine, bots., 4 ozs.....oz.20.00 - —
Hydrochloride, bots., 4 ozs..oz.20.00 - —
Sulphate, bots., 4 ozs.....oz.20.00 - —
Hydrastinine, 15 grs., bots...bot. 1.95 - —
Hydrastis (see Golden seal).
Hydrofuramide, dms., 100 lbs. or more, works..lb. .30 - —
fib. ctns., works.....lb. .40 - —
Hydrogen peroxide, USP, bbls.lb. .03¾- .04
100 vols., cbys., E. of Miss. River; West Coast via Panama Canal..lb. .16 - .18½
Hydroquinone, dealers, bbls., dms. lb. .90 - .94
Hydroxycitronellal, cns.....lb. 5.90 - 6.05
Hyoscine hydrobromide, bots., gram. 4.50 - —
Hyoscyamine, bots.....oz.37.50 - —
Hydrobromide, bots.....oz.37.50 - —
Sulphate, bots.....oz.37.50 - —
Hypernic, cryst., bgs., No. 1..lb. .42 - —
No. 2..lb. .34 - —
extract, bbls., No. 1.....lb. .24 - —
No. 2..lb. .19 - —

I

Iceland moss, bls.....lb. .40 Nom.
Ichthyol, bots.....lb. 4.00 - —
Indian red (see Red, Indian).
Indigo, nat., Madras, cs.....lb. 2.14 - 2.20
synth., liq., bbls.....lb. .16½- .19
powd., bbls.....lb. .74½- .85
Indium metal.....oz.12.50 - —
Indol, CP, bots.....lb.28.00 -30.00
Insect flowers (see Pyrethrum).
Iodine, crude, jars, 25 lbs.....lb. 1.67 - —
kgs., 150 lbs., less 5%, ex whse., Staten Island..lb. 1.35 - 1.44
resubl., bots., 5 lbs.....lb. 2.10 - —
jars, 50 lbs.....lb. 2.00 - —
Iodoform, dms., 100 lbs.....lb. 3.95 - 4.10
jars .....lb. 4.20 - —
Ionone, alpha, bots.....lb. 2.75 - 2.80
beta, bots.....lb. 3.90 - 3.95
Methyl, alpha, 100%, cns.....lb. 4.35 - —
Ipecac root, bgs.....lb. 1.45 - 1.50
powd., bxs.....lb. 1.50 - 1.55
Irish moss, ordinary, bls.....lb. .30 - .31
powd., 80-90 mesh, bbls..lb. .35 - .36
prime bleached, bls.....lb. .45 - .46
Iron acetate, N. F., IV, 100-lb. cbys..lb. .15 - —
djns., 50 lbs.....lb. .16 - —
liquor, bbls., c.l., divd.....lb. .03 - —
l.c.l., dlvd.....lb. .04 - —
Chloride (ferric), tech., anhydr., 390-lb. dms..100 lbs. 4.65 - 6.25
150-lb. dms.....100 lbs. 5.00 - 6.00
cryst., bbls., works, frt. alld. or equald..lb. .05 - .06
kegs, works, frt. alld. or equald..lb. .07½- .08
liquor, cbys., wks., frt. alld. or equald..lb. .05 - .06
USP X, cryst., bbls.....lb. .07½- —
kegs .....lb. .08½- —
solut. cbys., works, frt. alld. or equald..lb. .06½- .07
djns. .....lb. .07½- —
Citrate, USP VIII, pearls....lb. .72 - .75
powd., cns.....lb. .84 - .87
scales, cns.....lb. .77 - .80
Glycerophosphate, bbls., bgs., 1,000-lb. lots..lb. 3.30 - —
100-lb. lots.....lb. 3.40 - —
cns., 25 lbs.....lb. 3.52 - —
Hyposulphite, bbls., dms.....lb. 1.50 - 1.60
Iodide, bots.....lb. 3.18 - 3.32
syrup, cbys.....lb. .39 - .40
bots. .....lb. .53 - —
Nitrate, red, tech., dms.....lb. .03½- .04
Oxalate, powd., kgs.....lb. .47 - .49
cns. .....lb. .52 - —
scales, cns.....lb. .82 - .85
Oxide, black, bbls., works..lb. .08 - —
Phosphate, ferric, pearls, cns., 50 lbs..lb. .54 - —
25 lbs.....lb. .57 - —
scales, cns., 50 lbs.....lb. .59 - —
25 lbs.....lb. .62 - —
Pyrophosphate, pearls, cns..lb. .59 - .62
scales, cns.....lb. .64 - .67
Reduced, 90%, cs.....lb. .65 - .75
Sulphate, tech. (see Coppers and ferrie sulphate).
Sulphate, USP, cryst., 275-lb. bbls..lb. .04½- —
dms., 100 lbs.....lb. .06½- —
Iron-ammonia citrate, brown, gran., 2,000-lb. lots, dms.. lb. .32 - —
200-lb. lots, dms.....lb. .35 - —
pearls, 2,000-lb. lots, dms.. lb. .32 - —
200-lb. lots, dms.....lb. .35 - —
scales, 2,000-lb. lots, dms.. lb. .44 - —
200-lb. lots, dms.....lb. .47 - —
Prices on green are the same as for brown.
Iron-ammonia oxalate, bbls...lb. .23½- —
dms., kgs.....lb. .25½- —
Iron-soda ovalate, bbls.....lb. .23½- —
dms. .....lb. .25½- .26½
Isobutyl acetate, 55-gal. dms., works..lb.0860 - —
tanks, works.....lb.0760 - —
Propionate, dms., works...lb. .102 - —
Isopentane, 50-gal. dms., single, works..gal. .45 - —
10-gal. dms., single, works..gal. .55 - —
Isophorone, dms., works.....lb. .25 - —
Isopropylamine, dms., works...lb. .35 - —
Isopropanol (see Alcohol, isopropyl).
Isopropyl acetate, dms., 5 gals., E. of Rockies, frt. alld..lb. .12 - —
c.l., E. of Rockies, frt. alld. lb. .08½- —
l.c.l., E. of Rockies, frt. alld..lb. .09 - —
tanks, E. of Rockies, frt. alld..lb. .07½- —
Alcohol (see Alcohol).
Ether, dms., 5 gals., frt. alld., gal. .55 - —
55 gals., c.l., E. of Miss., frt. alld..gal. .35 - —
55 gals., c.l., W. of Miss., frt. alld..gal. .39 - —
l.c.l., E. of Miss., frt. alld., gal. .44 - —
tanks, E. of Miss., frt. alld., gal. .25 - —
W. of Miss., frt. alld., gal. .29 - —

J

Jaborandi leaves, bls.....lb. .10 - .11
Jalap root, NF, bls.....lb. .55 - .60
powd., bbls., bxs.....lb. .60 - .65
resin, lump, 100-lb. lots, cns.lb. 5.85 - —
powd., bxs.....lb. 5.90 - —
Juniper berries, bgs.....lb. .60 - .65

K

Kamala, tins.....lb. .33 - .34
Kaolin (see China clay).
Kava kava root, bls.....lb. .14 - .16
Kerosene[3] at refinery:—
Bayone, 41-43 w.w., tanks, gal. .0530- —
California (f.o.b. San Francisco), truck..gal. .11½- —
Gulf ports, p.w., bulk.....gal. .07½- —
Louisiana - Arkansas, 41-43 w.w., blk..gal. .04⅝- .04⅝
Oklahoma-Texas, 41-43 w.w., tanks..gal. .04⅝- .04⅝
Pennsylvania, 45 w.w., tanks, gal. .06¼- .06½
Kola nuts, bgs.....lb. .08 - .09

L

Lady slipper root, bls.....lb. .48 - .50
Lanolin (see Adeps lanae).
Lard,[3] city, tubs.....100 lbs.11.50 -11.60
Middlewestern, trcs...100 lbs.10.90 -11.00
Neutral, trcs.....100 lbs.12.25 -12.50
Western, choice, trcs..100 lbs.11.00 -11.25
Compound, trcs.....100 lbs.16.00 -16.25
Larkspur seed, bgs.....lb. 6.00 - 6.25
Laurel berries, bls.....lb. .25 - .26
Greek, bls.....lb. .58 - .59
cypress, bls.....lb. .52 - .54
Portuguese, bls.....lb. .20 - .21
Spanish .....lb. .21 - .21½
Lavender flowers, ordinary, bls.lb. .45 - .50
medium, bls.....lb. .83 - .85
select, bls.....lb. .95 - 1.00
Lead,[2] metal (see paint market).
Acetate, white, broken, bbls. lb. .12 - .12½
cryst., bbls.....lb. .12 - .12½
gran., bbls.....lb. .12¾- .13¼
powd., bbls.....lb. .12¾- .13¼
Arsenate, bls., c.l.....lb. .09 - .11
l.c.l., bgs.....lb. .09½- .11½
Lead arsenate prices are works or whse. basis, frt. alld. to dest. in lots of 96 lbs. or over; no frt. or truck allowance for works or whse. pick-ups.
Blue, basic sulphate, bbls., c.l., dlvd. E..lb. .06¾- —
dlvd., Ariz., Cal., Col., Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo..lb. .07 - —
l.c.l., dlvd. E.....lb. .07 - —
Ariz., Cal., Col., Idaho, Mont., Nev., N.M., Ore., Utah, Wash., Wyo..lb. .07½- —
Carbonate (see Lead, white).
Chloride, fib, dms., 100 lbs..lb. .49 - —
Iodide, NF V, powd., 5-lb. bots. lb. 2.80 - —
jars ....lb. 2.69 - —
Linoleate, pale, precip., dms., lb. .19 - —
Metal (see daily quotations in market report).
Metallic, paste, 200-lb. cont., f.o.b. works..lb. .10 - —
5-lb. cont., f.o.b. works....lb. .22 - —
Nitrate, bbls.....lb. .11 - .14
Peroxide, powd., bbls., tech..lb. .23 - —
Oleate, bbls.....lb. .18½- .20
Red, dry, 95% or less Pb_3O_4, bbls., c.l. (20 tons), dlvd. Ariz., Ark., Colo., Fla., Ga., Idaho, La., Miss., Mont., Nev., N. Mex., Okla., Tex., Utah, Wyo., and E. of Cascade Mts. in Ore. and Wash..lb. .0860- —
Other points.....lb. .0835- —
l.c.l., 5 tons, dlvd., Ala., Ark., Cal., Fla., Ga., La., Miss., Okla., Tex. and W. Cascade Mts. in Ore. and Wash...lb. .09 - —
Ariz., Idaho, Nev., Utah and E. of Cascade Mts. in Ore. and Wash. lb. .09½- —
Colo., Mont., N. Mex., Wyo..lb. .09¼- —
other points.....lb. .08¾- —
smaller lots, Ala., etc..lb. .09¼- —
Ariz., etc.....lb. .10 - —
Colo., etc.....lb. .09¾- —
other points.....lb. .09¼- —
97%, Pb_3O_4, bbls., c.l. (20 tons), dlvd. Ala., etc..lb. .0885- —
other points.....lb. .0860- —
l.c.l., 5 tons, dlvd., Ala., etc..lb. .08¼- —
Ariz., etc.....lb. .09¾- —
Colo., etc.....lb. .07½- —
other points.....lb. .09 - —
smaller lots, dlvd. Ala., etc..lb. .09¾- —
Ariz., etc.....lb. .10 - —
Colo., etc.....lb. .09¾- —
other points.....lb. .09¼- —
98%, Pb_3O_4, bbls., c.l. (20 tons), dlvd., Ala., etc..lb. .0910- —
other points.....lb. .0885- —
l.c.l., 5 tons, dlvd. Ala., etc..lb. .09½- —
Ariz., etc.....lb. .10 - —
Colo., etc.....lb. .09¾- —
other points.....lb. .09¼- —
smaller lots, dlvd. Ala., etc..lb. .10 - —
Ariz., etc.....lb. .10½- —
Colo., etc.....lb. .10¼- —
other points.....lb. .09¾- —
in oil, 95% min., 100-lb. kgs. lb. .12½- —
Resinate, fused, 15%, bbls...lb. .09½- —
pale, bbls.....lb. .11½- —
Silicate, bgs., 5 tons.....lb. .0675- —
smaller lots.....lb. .0725- —
Stearate, bbls.....lb. .25 - —
Sulphate (see Lead, white basic sulphate).
Nitrate, bgs., or bbls., c.l., basic sulphate, bbls., c.l. (20 tons), works, frt. alld..lb. .10¼- —
l.c.l., 5 tons, one delivery, E., frt. alld..lb. .10½- —
Pac. Cst., ex whse....lb. .10½- —
smaller lots, E. frt. alld..lb. .10¾- —
Pac. Cst., ex whse....lb. .10¾- —
White, dry, basic carbonate, bbls., c.l., dlvd. Ariz., Calif., Colo., Idaho, Mont., Nev., N. Mex., Ore., Utah, Wash. and Wyo..lb. .07¾- —
other points.....lb. .07½- —
l.c.l., dlvd. Ariz., etc...lb. .08 - —
other points.....lb. .07¾- —
basic sulphate, bbls., c.l., dlvd. Ariz., etc.....lb. .07 - —
other points.....lb. .06¾- —
l.c.l., dlvd. Ariz., etc...lb. .07½- —
other points.....lb. .07 - —
in oil, 100-lb. kgs., consumers. lb. .13¼- —
dealers .....lb. .11¼- —
painters .....lb. .12¼- —
Consumers' prices and painters' prices are ½c. lower on orders of 500 lbs. or more.
Lecithin, 100%, cns., f.o.b. N.Y. or Chi..lb. 2.50 - —
edible, grade 1, dms., c.l., same basis..lb. .45 - —
l.c.l., same basis.....lb. .47½- .65
grades 2 or 3, dom., c.l., same basis..lb. .47½- —
l.c.l., same basis.....lb. .50 - .67½
grade 4, dms., c.l., same basis. lb. .50 - —
l.c.l., same basis.....lb. .52½- .70
purified, cs., dms., c.l., same basis..lb. .65 - —
l.c.l., same basis.....lb. .67½- .85
tech., grade 1, dms., c.l., same basis..lb. .35 - —
l.c.l., same basis.....lb. .37½- .55
grade 2 or 3, dms., c.l., same basis..lb. .37½- —
l.c.l., same basis.....lb. .40 - .57½
Lecithin, tech., grade 4, dms., c.l., same basis..lb. .40 - —
Lecithin prices quoted above are for goods packed in 25, 50 or 100-lb. dms. When goods are packed in 500-lb. dms. prices are 1c. per lb. less.
Lemon peel, bls.....lb. .30 - .32
Licorice extract, mass, cs.....lb. No prices
powd., bbls.....lb. No prices
root, natural, bls.....lb. .28 - .30
powder, bbls., bxs.....lb. .32 - .36
select, bdls., cs.....lb. No stocks
Lime, chemical (quicklime), lump or pebble, bulk, f.o.b.:—
Adams, Mass.....ton. 8.00 - —
Bellefonte, Pa.....ton. 7.50 - —
Berkley, W. Va.....ton. 7.50 - —
Carey, Ohio.....ton. 7.00 - —
Cedar Hollow, Pa...ton. 8.50 - —
Crab Orchard, Tenn..ton. 6.25 - —
Eagle Mountain, Va...ton. 7.00 - —
Farnams, Mass.....ton. 8.00 - —
Gibsonburg, Ohio....ton. 7.00 - —
Hannibal, Mo.....ton. 6.50 - —
Keystone, Ala.....ton. 6.25 - —
Knoxville, Tenn.....ton. 6.25 - —
Limedale, Ark.....ton. 7.00 - —
Longview, Ala.....ton. 6.25 - —
Manistique, Mich....ton. 8.00 - —
Martinsburg, W. Va...ton. 7.50 - —
Menominee, Mich....ton. 8.00 - —
Mitchell, Ind.....ton. 6.50 - —
Newala, Ala.....ton. 6.25 - —
Rincon, Cal.....ton.13.00 - —
Ripplemead, Va.....ton. 7.00 - —
Riverton, Va.....ton. 7.00 - —
Rockland, Me.....ton. 8.00 - —
San Francisco, Cal..ton.13.00 - —
Scioto, Ohio.....ton. 6.50 - —
Springfield, Mo.....ton. 7.00 - —
Woodville, Ohio.....ton. 7.00 - —
York, Pa.....ton. 7.50 - —
Hydrated, paper bgs., f.o.b.:—
Adams., Mass.....ton. 8.50 - —
Bellefonte, Pa.....ton. 9.00 - —
Berkley, W. Va.....ton. 9.00 - —
Buffalo, N. Y.....ton.10.00 - —
Carey, Ohio.....ton. 8.50 - —
Cedar Hollow, Pa....ton. 8.00 - —
Crab Orchard, Tenn..ton. 9.00 - —
Eagle Mountain, Va..ton. 8.50 - —
Farnams, Mass.....ton. 8.50 - —
Gibsonburr, Ohio....ton. 8.50 - —
Hannibal, Mo.....ton. 8.50 - —
Keystone, Ala.....ton. 9.00 - —
Knoxville, Tenn.....ton. 9.00 - —
Le Roy, Minn.....ton.10.00 - —
Lime Crest, N. J....ton. 8.50 - —
Limedale, Ark.....ton. 9.00 - —
Longview, Ala.....ton. 9.00 - —
Louisville, Ky.....ton.14.50 - —
Manistique, Mich....ton. 9.50 - —
Marblehead, Ohio....ton. 9.50 - —
Martinsburg, W. Va..ton. 9.00 - —
Mitchell, Ind.....ton. 9.00 - —
Newala, Ala.....ton. 9.00 - —
Potoskey, Mich.....ton. 9.00 - —
Port Island, Mich...ton. 9.00 - —
Rapid City, S. D....ton.12.00 - —
Ripplemead, Va.....ton. 9.00 - —
Rockland, Me.....ton. 9.00 - —
San Francisco, Cal...ton.16.00 - —
Springfield, Mo.....ton. 9.00 - —
Woodville, Ohio.....ton. 8.50 - —
York, Pa.....ton. 8.50 - —
spray, paper bgs., f.o.b.—
Adams, Mass.....ton. 9.50 - —
Bellefonte, Pa.....ton. 9.00 - —
Carey, Ohio.....ton.11.00 - —
Farnams, Mass.....ton. 9.50 - —
Gibsonburg, Ohio....ton.11.00 - —
Lime Crest, N. J....ton. 8.50 - —
Marblehead, Ohio....ton.11.00 - —
Rockland, Me.....ton.10.00 - —
Scioto, Ohio.....ton.10.00 - —
Woodville, Ohio.....ton.11.00 - —
York, Pa.....ton. 9.00 - —
Lime salts (see Calcium).
Lime-sulphur, dry, dealers, bgs., c.l., E. of and incl. N. Dak., S. Dak., Neb., Kans., Okla., Tex..lb. .07½- .08½
dms., same basis.....lb. .10½- —
400 lbs. or more, bgs., same basis..lb. .07¾- .08¾
dms., same basis.....lb. .11 - —
less than 400 lbs., same basis..lb. .08½- .09½
dms., same basis.....lb. .12 - —
Solution, Zone 1, dms., consumers..gal. .16 - —
Zone 2, tanks, dealers, wks. gal. .08½- —
30-50, dms.....gal. .11 - .16
Zone 3, tanks, dealers, dlvd. gal. .07½- —
30-50, dms.....gal. .10½- .14½
Zone 4, tanks, dealers, wks. gal. .08 - —
dms., wks., except Cal.gal. .12 - —
Zone 5, tanks, dealers, dlvd., gal. .10½- —
dms. .....gal. .12 - —
Zone 6, tanks, dealers.....gal. .07½- —
30-50, dms.....gal. .10 - .14
Prices for lime sulphur solution are f.o.b. warehouse points, freight allowed. Zone 1 includes Ga., S. C., Ala., N. C., except the counties of Ashe, Surry, Stokes, Rockingham and Alleghany; Tenn., east of Tenn. river. Zone 2: New England States. Zone 3: Ark., Ohio, Ind., Ill., Ia., Ky., Wis., Minn., Mo. and Tenn. west of Tenn. river; Penn., eastern tier, and W. Va., western tier. Zone 4: West of Rocky Mountains, except southern California, which makes up Zone 5. Zone 6: N. Y. east of Herkimer, N. J., Md., Del., Va., Pa.—all counties lying east of the western boundary of Bedford, Blair, Center, Clinton and Potter, W. Va.—counties of Mineral, Hampshire, Morgan, Berkeley, Jefferson, and Hardy, N. C.—counties of Ashe, Allegheny, Surry, Stokes and Rockingham.
Linalool, cns.....lb. 4.75 - 5.00
Linalyl acetate, 70%, cns.....lb. 5.50 - 6.00
90%, cns.....lb. 6.50 - 6.75
92%, cns.....lb. 7.00 - 7.25
Linden flowers, bls.....lb. .85 - .90
without leaves, bls.....lb. No stocks
Linseed, meal, bgs.....ton.33.50 - —
Litharge, com'l powd., bbls., 20 tons, dlvd., Ala., Ariz., Ark., Colo., Fla., Ga., Idaho, La., Miss., Mont., Nev., N. Mex., Okla., Tex., Utah, Wyo., and E. of Cascade Mts. in Ore., and Wash..lb. .0760- —
dlvd. other points.....lb. .0735- —
5 tons, dlvd., Ala., Ark., Cal., Fla., Ga., La., Miss., Okla., Tex. and W. of Cascade Mts. in Ore. and Wash..lb. .08 - —
Ariz., Idaho, Nev., Utah and E. of Cascade Mts. in Ore. and Wash...lb. .08½- —
Colo., Mont., N. Mex., Wyo..lb. .08¼- —
Other points.....lb. .07¾- —

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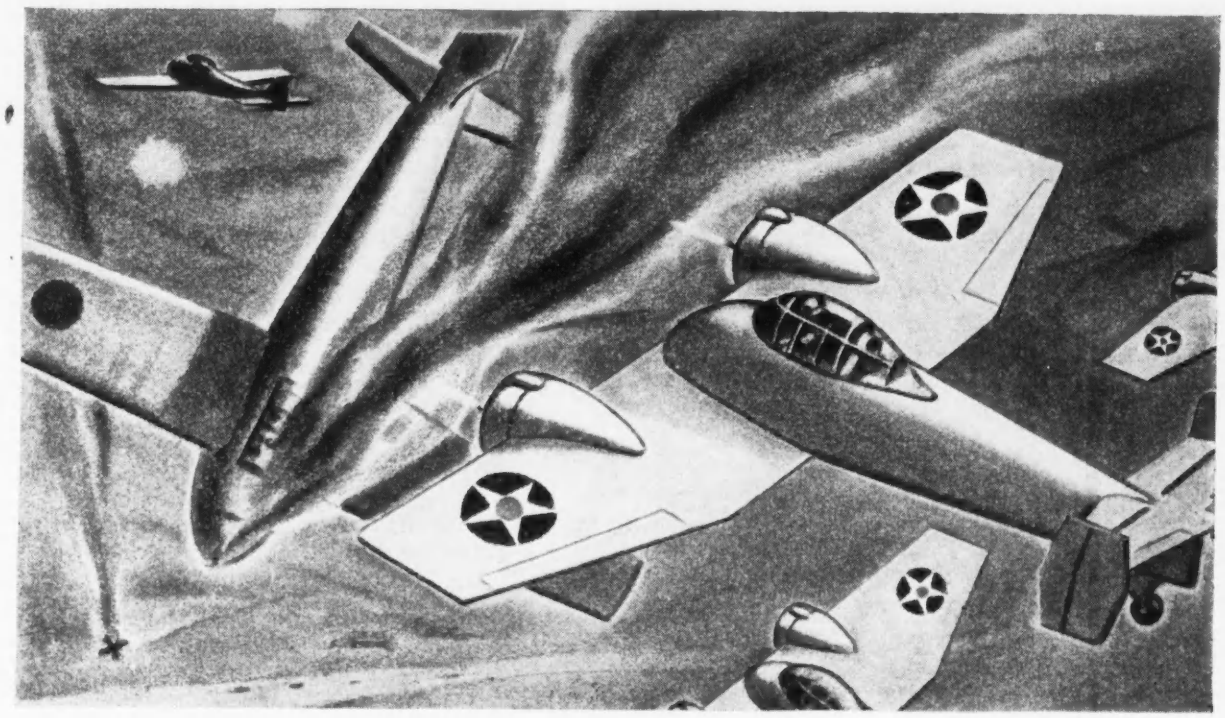
Here is America's first line of defense in the air—new fighter planes that are powered with two 1500 HP engines, carry four .50 caliber machine guns and two 37mm cannon, and fly 450 mph.



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CLOSURES

AMERICAN FLANGE & MANUFACTURING CO. INC., 30 ROCKEFELLER PLAZA, NEW YORK, N. Y.

Litharge—Oil, Bois de Rose

Litharge, com'l powd., dlvd., Zone 2, c.l., bgs.....lb. .06¼- —
Ariz., etc.....lb. ow - -
Colo., etc.....lb. .08¾- —
Other points.....lb. .08¼- —
Lithium bromide, bbls., 100 lbs., works, frt. equal'd..lb. 1.90 - —
50 lbs., works.....lb. 1.93 - —
25 lbs., works.....lb. 1.95 - —
Carbonate, NF VI, 250-lb. bbls., lb. 1.25 - —
100-lb. kgs. .....lb. 1.30 - —
Chloride, 25-lb. jars.....lb. 1.65 - 1.70
Citrate, 250-lb. bbls.....lb. 1.40 - —
25-lb. dms. .....lb. 1.45 - —
100-lb. kgs. .....lb. 1.40 - —
Fluoride, bbls. .....lb. 2.10 - 2.20
Iodide, 5-lb. bots. .....lb. 5.20 - —
25-lb. jars .....lb. 5.05 - —
Lithopone,[3] titanated (high-strength), bgs., c.l. (20 tons)..lb. .0560- —
smaller lots.....lb. .0585- —
bbls., c.l. (20 tons).....lb. .0585- —
smaller lots.....lb. .0610- —
ordinary, bgs., c.l. (20 tons) .lb. .04¼- —
smaller lots.....lb. .04½- —
bbls., c.l. (20 tons).....lb. .04½- —
smaller lots.....lb. .04¾- —

Lithopone in car lots is ¼c. per lb. higher delivered to the Pac. Cst., and in less car lots is ½c. higher ex whse, Pac. Cst.

Liverwort, leaves, bls.....lb. .55 - .60
Lobelia, herb, bls.....lb. .50 - .55
Logwood, cryst., bgs., No. 1..lb. .28 - —
No. 2..lb. .26 - —
extract, bbls., No. 1.....lb. .14 - —
No. 2..lb. .13 - —
No. 3..lb. .12½- —
No. 4..lb. .10 - —
solid, bxs., No. 1.....lb. .23½- —
No. 2..lb. .21½- —
Lovage root, dms., bls.....lb. .45 - .50
imported, bls.....lb. No stocks
Lupulin, N. E., tins.....lb. 1.65 - 1.70
Lycopodium, cs. .....lb. 8.50 - 9.00

M

Mace, Banda, cs.....lb. .98 - .99
Batavia, cs.....lb. .48 - .49
Siauw, cs.....lb. .68 - .69
West Indian, cs.....lb. .60 - .61
Madder, Dutch, bbls.....lb. .22 - .25
Magnesia, arsenate, dms.....lb. .18 - .20
Calcined, tech., USP, bbls., wks..lb. .26 - —
Carbonate, tech., Zone 1, c.l., bgs..lb. .06¼- —
bbls. .....lb. .07½- —
kgs. .....lb. .08¾- —
l.c.l., bgs. .....lb. .07¼- —
bbls. .....lb. .08½- —
kgs. .....lb. .09¾- —
Zone 2, c.l., bgs.....lb. .06¼- —
bbls. .....lb. .07½- —
kgs. .....lb. .08¾- —
l.c.l., bgs. .....lb. .07¼- —
bbls. .....lb. .08½- —
kgs. .....lb. .09¾- —
USP, Zone 1, c.l., bgs.....lb. .08 - —
bbls. .....lb. .08¼- —
kgs. .....lb. .09¾- —
l.c.l., bgs. .....lb. .09 - —
bbls. .....lb. .09½- —
kgs. .....lb. .10¾- —
Zone 2, c.l., bgs.....lb. .06¼- —
bbls. .....lb. .06½- —
kgs. .....lb. .09¾- —
l.c.l., bgs. .....lb. .08¾- —
bbls. .....lb. .09¼- —
kgs. .....lb. .10¾- —
Other points.....lb. .08 - —
Magnesia:—Zone 1—Mass., Conn., R. I., N.Y., N.J., Pa., D. of C., Del. and Md. c.l. shipments, frt. equald, with Phillipsburg, Ambler, Plymouth Meeting, Valley Forge, and New York. On l.c.l. shipments, frt. alld., including dlvd. storedoor. Magnesia prices are f.o.b. Plymouth Meeting. Zone 2—Balance of U.S.; prices f.o.b. Plymouth Meeting, Ambler, Phillipsburg, Valley Forge, and New York.

Magnesium, chloride, anhyd., dom., bbls., dlvd..lb. .13 - —
flake, dom., bbls., wks., c.l., ton.32.00 - —
l.c.l., bbls., wks.....ton.39.00 -42.00
Hydroxide, med., 200-lb. bbls.lb. .23 - —
25-lb. dms.....lb. .30 - —
100-lb. kgs.....lb. .26 - —
Hypophosphite, cns., 100 lb..lb. 1.45 - —
Oxide (see Calcined).
Palmitate, bbls.....lb. .33 - .35
Peroxide, 15%, dms., works..lb. 1.00 - 1.35
Silicate (see Talc).
Silicofluoride, bbls.....lb. .20 - .25
Stearate, bbls., ctns., 1 ton..lb. .31 - —
smaller lots.....lb. .33 - —
Sulphate (see Epsom salt).
Trisilicate, 1,000-lb. contracts, dms..lb. .37 - —
smaller lots, dms.....lb. .42 - —
cs., 500-lb. lots.....lb. .40 - —
100-lb. lots.....lb. .42 - —
5-lb. cns.....lb. .60 - —
Magnesite, cal., dom., bgs...ton.74.00 -80.00
imports, bgs., duty paid..ton. No prices
dead-burned, dom., bulk, c.l., f.o.b. Chewelah, Wash..ton.22.00 -25.00
Malva flowers, black, bls.....lb. 1.75 - 2.00
blue, bls.....lb. 2.25 - 2.50
Leaves, bls.....lb. .40 - .45
Manaca root, bls.....lb. .23 - .24
Mandrake root, bls.....lb. .25 - .26
Manganese acetate, dms.....lb. .26½- —
Arsenate, bgs.....lb. .12 - .12½
Borate, tech., bbls.....lb. .15 - .16
Carbonate, bbls.....lb. .19 - —
Chloride, bbls.....lb. .14 Nom.
Dioxide, African, battery, 84-87%, bbls., 28-40 tons, works, ton.74.00 - —
5-15 tons, works.....ton.77.00 - —
½, 4 tons, works.....ton.82.00 - —
Caucasian, 85-90%, bbls., c.l., works..ton.74.00 - —
l.c.l., 5 tons, works....ton.77.00 - —
smaller lots, works..ton.82.00 - —
burlap bgs., c.l., works, ton.71.75 - —
l.c.l., 5 tons, works...ton.74.75 - —
smaller lots, works..ton.79.75 - —
paper bgs., c.l., works..ton.70.00 - —
l.c.l., 5 tons, works....ton.73.00 - —
Glycerophosphate, bbls., bgs., 1,000-lb. lots..lb. 3.05 - —
100-lb. lots.....lb. 3.15 - —
cns., 25 lbs.....lb. 3.27 - —
Hydrate, bbls., dlvd.....lb. .82 - —
Iodide, bots., 5 lbs.....lb. 5.70 - —
jars, 25 lbs.....lb. 5.55 - —
Linoleate, liquid, 4%, dms...lb. .18 - .19½
Linoleate, liquid, 4%, dms...lb. .18 - .19½
solid, precip., 8.2%, bbls...lb. .19 - —
Resinate, fused, 3½%, bbls.ton. .08¼- .08½
precip., dms.....lb. .12 - —

Manganese, sulphate, anhyd., ton lots, works..lb. .10½ Nom.
single, bbls., works.....lb. .11½ Nom.
fertilizer, 85%, Mnso₄, bgs., c.l., dlvd. rail stations in Southern freight territory .....ton.59.50 - —
l.c.l., bgs., same basis or f.o.b. Balto. or Cincinnati .....ton.66.50 - —
Mangrove bark, bgs., shipt...ton.37.00 -38.00
Manna flake, large, cs.....lb. No stocks
small, cs.....lb. 3.45 - 3.50
Mannitol, com'l grade, bbls., ton lots, works..lb. .35 - —
smaller lots, works.....lb. .40 - —
reagent grade, 50-lb. cs., or multiples, works..lb. .85 - —
Marjoram, French, No. 1.....lb. .84 - .86
Tunisian, bls.....lb. .55 - .56
Chilean .....lb. .45 - .46
Menthol, natural, cs.....lb.13.75 -14.00
synthetic, USP, cs.....lb. No prices
technical, 60-lb. cs.....lb. 3.00 - —
smaller lots.....lb. 3.10 - 3.25
Menthyl salicylate, tins, 100-lb. lots..lb. 3.00 - —
25-lb lots.....lb. 3.10 - —
Mercurial ointment, 30%, pails, 50 lbs.....lb. 1.44 - —
25 lbs.....lb. 1.46 - —
50%, pails, 50 lbs.....lb. 2.09 - —
25 lbs.....lb. 2.11 - —
Mercury (see Quicksilver).
Ammoniated (see White precipate).
Bichloride (see Corrosive sublimate).
Bisulphate, 5-lb. bots.....lb. 3.02 - —
100-lb. fib. dms.....lb. 2.89 - —
25-lb. jars.....lb. 2.91 - —
Chloride (see Calomel).
Cyanide, cryst.....lb. 4.00 - 4.05
powd. .....lb. 4.00 - 4.05
Iodide, red, NF, 5-lb. bots..lb. 4.66 - 4.71
100-lb. fib. dms.....lb. 4.60 - —
yellow, 5-lb. bots.....lb. 4.76 - 4.81
fib. dms., 100 lbs.....lb. 4.70 - —
Nitrate ointment (see Citrine ointment).
tech. (see Red, mercury oxide).
yellow, tech. (see Yellow, mercury oxide).
NF VI, fib. dms., 50 lbs., or more..lb. 3.38 - —
Oxide, red, NF (see Red precipitate).
Mercury and chalk, 5-lb. ctns..lb. 1.98 - —
25-lb. fib. dms.....lb. 1.86 - 1.88
Mesityl oxide, dms., c.l., dlvd..lb. .11½- —
l.c.l., dlvd.....lb. .12 - —
Metal leaf, Japanese, pkgs. of 20 books (500 leaves), aluminum, 5½x5½ in..pkg. 2.50 - —
composition, 5½x5½ in.....pkg. 3.00 - —
gold, XX, deep, 23K, 3⅜x3⅜ in. pkg.15.00 - —
silver, 3⅜x3⅜ in.....pkg. 3.00 - —
Metanitroparatoluidin, bbls....lb. 1.05 - 1.10
Metaphenylenediamine, kgs....lb. .65 - —
Metatoluylenediamine, kgs.....lb. .70 - —
Methanol, natural, 1,[4] producer group A, all grades, E. of Miss. R., tanks..gal. .60 - —
dms., c.l.....gal. .66 - —
l.c.l .....gal. .76 - —
Methanol prices W. of Miss. R. are 3c. per gal. higher.
Natural pure, group B, tanks, frt. alld., Zone 1..gal. .50 - —
Zone 2.....gal. .52 - —
Zone 3.....gal. .54 - —
Zone 4.....gal. .54½- —
dms., c.l., Zone 1.....gal. .55½- —
Zone 2.....gal. .57½- —
Zone 3.....gal. .59½- —
Zone 4.....gal. .61½- —
l.c.l., Zone 1.....gal. .58½- —
Zone 2.....gal. .75½- —
Zone 3.....gal. .62½- —
Zone 4.....gal. .75½- —

Natural methanol sales zones are:—Zone 1, Conn., Del., D. of C., Ill., Ind., Iowa, Ky., Me., Md., Mass., Mich., Minn., Mo., N. H.; N. J.; N. Y., N. C., Ohio, Tenn., R. I., Vt., Va., W. Va., Wisc.; zone 2, Ala., Ark., Col., Fla., Ga., Kan., La., Miss.., Neb., N. D., Okla., S. C., S. D., Tex., Wyo.; zone 3, Los A., San Fran., Seattle, Wash., Portland, Ore.; zone 4, Ariz., Cal., Idaho, Mont., Nev., N. Mex., Ore., Utah, Wash.

Synthetic, [2, 5, 6] pure, dms., c.l., Zone 1, frt. alld....gal. 34½- —
2, frt. alld.....gal. .36½- —
3, frt. alld.....gal. .38½- —
4, frt. alld.....gal. .40½- —
dms., l.c.l., Zone 1, frt. alld. or dlvd..gal. .37 - —
2, frt. alld. or dlvd..gal. .44½- —
3, dlvd., S. F. and L. A., gal. .41 - —
4, frt. alld. or dlvd..gal. .52½- —
tanks, Zone 1, frt. alld..gal. .28 - —
2, frt. alld.....gal. .30 - —
3, frt. alld.....gal. .32 - —
4, frt. alld.....gal. .32½- —

Synthetic methanol sales zones are:—Zone 1, Conn., Del., D. C., Ill., Ind., Iowa, Ky., Me., Md., Mass., Mich, Minn., Mo., N. H. N. J., N. Y., N. C., Ohio, Penn., R. I., S. C., Tenn., Vt., Va., W. Va., Wis.; Zone 2, Ala., Ark., Col.,, Fla., Ga., Kans., La., Miss., Neb., N. D., Okla., S. D., Tex., Wyo.; Zone 3, Los Angeles, Cal.; San Francisco, Cal.; also (c.l. only) Portland, Ore., and Seattle, Wash.; Zone 4, Ariz., Cal., N. Mex., Mont., Nev., Idaho, Ore., Utah, Wash.

Methyl acetate, 97-99%, dms., c.l., E. of Miss. R..lb. .10½- .12
W. of Miss. R.....lb. .11½- .13
l.c.l., dms., dlvd., E. of Miss. R..lb. .11 - .12½
W. of Miss. R.....lb. .12 - .13½
tanks, dlvd. E. of Miss. R.lb. .09½- —
W. of Miss. R.....lb. .10¾- —
tech., dms., c.l., dlvd. E. of Miss. R..lb. .07 - .09
W. of Miss. R.....lb. .08 - .10
l.c.l., dlvd. E. of Miss. R. lb. .07½- .09½
dlvd. W. of Miss R...lb. .08½- .10½
tanks, dlvd. E. of Miss. R. lb. .06 - —
W. of Miss. R.....lb. .07 - —
Acetoacetate, dms., c.l., works, frt. alld..lb. .29½- —
Acetone, natural, group A producers, E. of Rockies, frt. alld., tanks..gal. .75 - —
dms., c.l., same basis.....gal. .81 - —
l.c.l., same basis...gal. .86 - —

Methyl acetone prices on Pacific Coast are 3c. per gal. higher on tanks and 4c. per gal. higher on drums. car lots.
Synthetic tanks, Zone....gal. .43 - —
Zone 2.....gal. .44½- —
Zone 3.....gal. .45½- —
Zone 4.....gal. .45½- —
dms., c.l., Zone 1.....gal. .51 - —
Zone 3.....gal. .53½- —
Zone 4.....gal. .54½- —
l.c.l., Zone 1.....gal. .54½- —
Zone 2.....gal. .57 - —
Zone 3.....gal. .58 - —
Zone 4.....gal. .59½- —
Alcohol (see Methanol).
Anthranilate, 100-lb. lots....lb. 2.20 - —
25-lb. lots, bots.....lb. 2.35 - —
Benzoate, cns., 25 lbs.....lb. 1.10 - 1.15
Methyl, chloride, refrigeration, 500 lbs. and up, machine mfrs. and jobbers, cylinders, lb. .32 - —
service men and consumers, cyl..lb. .36 - —
60 to 490 lbs., cyl., mach. mfrs. and jobbers..lb. .36 - —
service men and consumers, cyl..lb. .40 - —
tanks, multi-unit, mach. mfrs. and jobbers..lb. .31 - —
service men and consumers..lb. .35 - —

Methyl chloride quotations are spot or contract, effective July 1, for delivery to any common carrier point in United States. Prices above are in 60, 90 and 180-lb. cylinders. Prices on the 20-lb. cylinders are uniformly 10c. per pound higher than above prices.

Cinnamate, bls.....lb. 1.50 - 4.00
Formate, dms.....lb. .89 - —
Lactate, dms., l.c.l., dlvd....lb. .70 - —
Iodide, bots.....lb. 4.00 - 4.15
Salicylate, dms.....lb. .35 - .37
cns. .....lb. .37 - .40
Molybdated[3] violet toner, bbls. lb. .35 - —
Methylamyl ketone, dms., works, l.c.l..lb. .25 - —
smaller containers, same basis, lb. .28 - —
Methylcellulose, dms., 2,000 lbs. or more, works..lb. .50 - —
100 to 1,999 lbs., works...lb. .55 - —
1 to 99 lbs., works.....lb. .60 - —
Methylcyclohexane, 98-100%, dms., works..lb. .16 - —
Methylcyclohexanol, 98-100%, dms., works..lb. .23 - —
Methylcyclohexanone, 98 - 100%, dms., works..lb. .32 - —
Methylene blue, medcl., kgs., 100 lbs..lb. 2.00 - —
cns., 5 lbs.....lb. 2.35 - —
Chloride, dms., f.o.b. works..lb. .18 - .22
Methylethyl ketone, dms., c.l., frt. pd. E. of Rocky Mts., lb. .09 - —
l.c.l., same terms.....lb. .09½- —
tanks, same terms.....lb. .08 - —
Methylhexyl ketone, dms., tech., works..lb. .60 - —
Methylisobutyl ketone, dms., c.l., dlvd..lb. .12 - —
l.c.l., dlvd.....lb. .12½- —
tanks, dlvd.....lb. .11 - —
Methylnaphthyl ketone, dom., cryst., cns..lb. 3.00 - 3.10
Metronite pigment, 120 mesh, containers extra, c.l., f.o.b. Milwaukee...ton. 9.00 - —
l.c.l., same basis.....ton.11.00 - —
180 mesh, containers extra, c.l., same basis..ton.11.00 - —
l.c.l., same basis.....ton.13.00 - —
250 mesh, containers extra, c.l., same basis..ton.12.00 - —
l.c.l., same basis.....ton.14.00 - —
325 mesh, containers extra, c.l., same basis..ton.15.00 - —
l.c.l., same basis.....ton.17.00 - —
400 mesh, containers extra, c.l., same basis..ton.17.50 - —
l.c.l., same basis.....ton.19.50 - —
Mica, dry grd., amber, No. 1, quality, c.l..ton.30.00 - —
l.c.l., 5,000 lbs.....ton.40.00 - —
1,000 lbs.....lb. .02 - —
500 lbs.....lb. .02½- —
100 lbs.....lb. .03 - —
refined, c.l.....ton.20.00 - —
l.c.l., 5,000 lbs.....ton.30.00 - —
paint, c.l.....ton.55.00 - —
l.c.l., 5,000 lbs.....ton.65.00 - —
white, No. 1 quality, c.l...ton.35.00 - —
l.c.l., 5,000 lbs.....ton.45.00 - —
1,000 lbs.....lb. .02½- —
500 lbs.....lb. .03 - —
roofing, c.l.....ton.29.00 - —
l.c.l., 5,000 lbs.....ton.39.00 - —
paint, c.l.....ton.60.00 - —
l.c.l., 5,000 lbs.....ton.70.00 - —
wet grd., paint or lacquer, c.l..lb. .04½- —
l.c.l .....lb. .05 - —
paper, wall or coated, c.l.lb. .04½ - —
l.c.l .....lb. .05 - —
rubber, c.l.....lb. .04½- —
l.c.l .....lb. .04¾- —
biotite, c.l.....lb. .03¾- —
l.c.l .....lb. .04¼- —

Mica, dry grd., is quoted in bags at the works; wet grd. mica in carload lots is frt. alld. E., and in less carload lots ex whse. or frt. alld. E. Prices of the wet grd. are ½c. per lb. higher west of the Mississippi.

Milk, powder, skimmed, roller, bbls., c.l..lb. .14 - .15
l.c.l .....lb. .15 - .16
spray, bbls., c.l.....lb. .14½- .15½
l.c.l .....lb. .15½- .16½
unskimmed, roller, bbls., c.l., lb. .26 - .27
l.c.l .....lb. .26½- .27½
spray, bbls., c.l.....lb. .27 - .28
l.c.l .....lb. .27½- .28½
Millet seed, yellow, bgs.....lb. .03 - .03½
early fortune, bgs.....lb. .03 - .03½
hulled, bgs.....lb. .07 - .07½
Mineral spirits (see Petroleum thinners and VM & P naphtha).
Molasses, blackstrap, tanks, f.o.b. No. Atlantic ports..gal. .16 - .17
f.o.b. Gulf ports .....gal. .16 - .20
Molybdate orange (see Orange, molybdate).
Molybdenum metal, kgs., 99% powd..lb. 2.60 - 3.00
Molybdenum, trioxide, pure, kgs., basis Mo. content, works..lb. .95 - —
technical, kgs., basis Mo. content, works..lb. .80 - —
Monoamylamine, dms., basis 100%, c.l., wks..lb. .50 - —
l.c.l., works.....lb. .53 - —
Monoamylnaphthalene, l.c.l., dms. works..lb. .17 - —
Monobutylamine, dms., basis 100%, c.l., wks..lb. .37 - —
l.c.l., works.....lb. .40 - —
Monoethanolamine, dms., c.l., works..lb. .24 - —
l.c.l., dms.....lb. .25 - —
tanks .....lb. .23 - —
Monoethylamine, basis 100%, dms., c.l., works..lb. .32 - —
l.c.l., works.....lb. .35 - —
Monochlorobenzene, dms., l.c.l. lb. .07 - —
smaller, cns.....lb. .08 - .09
Monoethylaniliin, dms.....lb. .47 - —
Monomethylamine, dms., c.l., l.c.l., dlvd.....lb. .65 - —
Monomethylpara-aminophenol-sulphate, dms..lb. 3.75 - 4.00
Monosodiumphosphate (see Soda phosphate monobasic).
Morphine, bots., 5 ozs.....oz.11.10 - —
cns., 25 ozs.....oz.10.90 - —
Acetate, bots., 5 ozs.....oz. 9.00 - —
bots., 25 ozs.....oz. 8.80 - —
Ethylhydrochloride, bots., 5 ozs., oz.10.75 - —
bots., 25 ozs.....oz.10.55 - —
Morphine, hydrobromide, 5 ozs., oz. 8.95 - —
cns., 25 ozs.....oz. 8.75 - —
Hydrochloride, powd., 5-oz. bots. oz. 9.00 - —
25-oz. cans.....lb. 8.80 - —
Sulphate, bots., 5 ozs.....oz. 9.00 - —
cns., 25 ozs.....oz. 8.80 - —
Morpholine, dms., 55 gals., l.c., works..lb. .67 - —
smaller containers, works....lb. .75 - —
Mullein leaves, cans.....lb. .15 - .16
flowers, cns.....lb. 3.50 - 3.75
Musk, nat., Tonquin, grains, bots..oz.30.00 -35.50
synth., ambrette, cns., 100 lbs. or more..lb. 3.75 - —
5 lbs. to 75 lbs.....lb. 3.85 - —
1 lb.....lb. 4.20 - —
ketone, cns., 100 lbs. or more, lb. 3.90 - —
5 lbs. to 75 lbs.....lb. 4.00 - —
1 lb.....lb. 4.35 - —
xylol, cns., 100 lbs. or more..lb. 1.15 - —
5 lbs. to 75 lbs.....lb. 1.25 - —
1 lb.....lb. 1.55 - —
Musk root, bls.....lb. 2.45 - 2.50
Mustard seed, California, brown, lb. .16 - .16½
yellow, bgs.....lb. .12½- .13
Chinese, yellow, bgs.....lb. .07½- .08
Danish, yellow.....lb. .27 - .28
Montana, yellow, bgs.....lb. .07½- .08
Roumanian, yellow.....lb. .14½- .15
Washington, yellow, bgs.....lb. .07½- .08
Myrobalans, J1, bgs., f.a.s...ton. No prices
J2, bgs., f.a.s. .....ton. No prices
Extract, liquid, 25%, bbls.....lb. No prices
solid, 50%, bbls.....lb. No prices
powdered, bbls.....lb. No prices

N

Naphtha, Painters (see Petroleum, naphtha, V. M. & P.).
Solvent (see S).
Naphthalene,[6] crude, dom., 74 deg., tanks, works...100 lbs. 2.50 - 2.75
78 deg., tanks, works..100 lbs. 2.75 - 3.00
Refined, balls or flakes, bbls., wholesalers and jobbers, f.o.b. works..lb. .03 - —
50-lb. cs., same basis....lb. .03¼- —
pkgs. (16 oz.), same basis..lb. .03½- —
(12 oz.), same basis....pkg. .07 - —
Nerolin, cryst., cns.....ub. 1.70 - 2.00
Nickel carbonate, bbls.....lb. .36 - .36½
Chloride, bbls.....lb. .18 - .20
Cyanide, 100 lbs., dms.....lb. 1.40 - —
25-lb. bot.....lb. 1.50 - —
Oxide, black, bbls.....lb. .35 - .38
Salt, bbls.....lb. .13 - .13½
Nicotine, sulphate, 40%, dms., works, frt. alld..lb. .703 - —
10-lb. tins.....lb. .86½- —
Niger seed, bgs.....lb. .20 - .21
Nitercake, bulk, works.....ton.16.00 - —
Nitrobenzene, dbl. dist., dms., c.l. lb. .08 - —
l.c.l .....lb. .09 - —
tanks .....lb. .07 - —
Nitrocellulose, alcohol-soluble, ½, and 40 sec. vis., bbls., wks. lb. .28 - —
bronzing, 20, 40, 70 sec. vis., bbls., works..lb. .29 - —
ester, soluble, 30-35, ¼, ½ sec., bbls., c.l., dry weight, works..lb. .22 - —
l.c.l., ¼, ½ sec., bbls., dry weight, works..lb. .26 - —
5-6, 15-20, 30-40, and 60-80 sec., bbls. c.l., dry weight, works..lb. .20 - —
l.c.l., 5-6, 15-20 sec., high vis., bbls., works..lb. .25 - —
Lacquer, 20-30 and 60-80 sec., vis., bbls., works..lb. .29 - —

Nitrocellulose prices are quoted on the basis of dry weight; denatured alcohol used in manufacture is charged extra. Barrels are to be paid for extra, but are returnable.

Nitroethane, l.c.l., dms..works.lb. .25 - —
Nitrogen solution, nitrogen basis, tanks, f.o.b. Atlantic and Gulf ports..unit-ton.1.2158- —
Nitrogenous fertilizer material, dom., 10% ammon., bulk, f.o.b. Carrolliville, Wis., dlvd..unit-ton. 2.60 - —
Chemical, Ill.....unit-ton. 2.60 - —
East Coast producing points unit-ton. 2.75 - 3.00
import, bgs., c.i.f. Atlantic, ports, shipt..unit-ton. No prices
Nitromethane, l.c.l., dms., works, lb. .25 - —
Nitronaphthalene, bbls.....lb. .24 - .25
Nitropropane I, l.c.l., dms., works lb. .25 - —
II, same basis.....lb. .25 - —
Nutgalls, Aleppo, bgs., oz.....lb. No price
Chinese, whole.....lb. .41 Nom.
Extract (see Gall extract).
Nutmegs, E. I., 80s, bgs., cs..lb. .32 - .34
110s, bgs., cs.....lb. .28 - .29
small, grinding, bgs.....lb. .24 - .25
West Indian, bgs.....lb. .22 - .23
Nux vomica, bls.....lb. .08 - .09
powd., bbls., bxs.....lb. .11 - .12

O

Oakbark extract, 25% tan., bbls., c.l., works..lb. .03½ Nom.
l.c.l., bbls., works.....lb. .03¾ Nom.
tanks .....lb. .02 Nom.
Ocher (see Yellow).
Octane,[3] 100-140° C., industrial grade, dms., c.l., G. 3, gal. .15½- —
l.c.l., G.3.....gal. .29 - —
10 gals., G.3.....gal. .55 - —
tanks, G.3.....gal. .13 - —
Octanol, normal, tech., 360-lb. dms., dlvd..lb. .85 - —
Oil, almond, bitter, artif. (see Benzaldehyde)
natural, U.S.P., bots.....lb. 3.50 - 3.75
sweet, true, exp., dms., cns. lb. 2.45 - 2.50
Amber, crude, cns.....lb. No stocks
ref'd, cns.....lb. No stocks
Amyris, cns.....lb. 3.75 - 4.00
Angelica, root, bots.....lb. 115.00-120.00
seed, bots.....lb. 120.00-125.00
Anilin (see A).
Anise, USP, cns., dms.....lb. 2.10 Nom.
Apricot, kernels, cns.....lb. .40 - .45
Avocado, cns., dms.....lb. 1.00 - 1.25
Bay, W. I., 50-55% phenols, cns..lb. 1.55 - 1.60
Porto Rican, 55-60% phenols, cns..lb. 1.65 - 1.70
Bergamot, artif., cns.....lb. 2.75 - 2.25
natural, coppers.....lb.32.00 -35.00
Birch (see Oil, sweet, birch).
Brchtar, crude, cns.....lb. .90 - —
rect'fd., cns.....lb. 1.50 - —
Bois de Rose, Brazil, cns....lb. 4.50 - 4.75
Mexican (see Linaloe, wood).

Oil, bone, dms., works.....gal. .65 - .75
Cade, USP IX (see Oil Juniper tar).
Cajeput, tech., dms.....lb. 1.75 Nom.
USP, IX, cns.....lb. No prices
USP, X, cns.....lb. No prices
Calamus, cns.....lb. No stocks
Camphor, sassafrassy, cns...lb. .42 - .43
dms. .....lb. .40 - .41
white, cns.....lb. .45 - .46
dms. .....lb. .43 - .44
Cananga, native, cns.....lb. 14.00 -15.00
rectified, cns.....lb. 15.00 -16.00
Capsicum (oleoresin), USP VIII, cns..lb. 3.85 - 5.50
Caraway, USP, cns.....lb. 15.00 -16.00
Cardamom, bots.....lb. 30.00 -35.00
Cassia, USP, cns.....lb. 10.00 Nom.
Castor,[1,5] blown, one-way dms., c.l..lb. .14 - —
l.c.l. .....lb. .14¾- —
cold pressed, USP, bbls., cl., lb. .12¾- —
l.c.l. .....lb. .13¼- —
cns. (1-gal.), l.c.l.....lb. .16½- —
cns. (5-gal), l.c.l.....lb. .14½- —
dms. (returnable), c.l...lb. .12½- —
l.c.l. .....lb. .13¼- —
tanks .....lb. .11¾- —
dehydrated, dms., c.l.....lb. .1690- —
l.c.l. .....lb. .1730- —
tanks .....lb. .16 - —
extracted, No. 3, tech., bbls., c.l..lb. .12½- —
l.c.l. .....lb. .13 - —
dms. (returnable), c.l.....lb. .12¼- —
l.c.l. .....lb. .13 - —
tanks .....lb. .11½- —
sulphonated, 50% (45% fat), dms., c.l..lb. .08¼- —
l.c.l. .....lb. .09¼- —
75% (63% fat), dms., c.l..lb. .11 - —
l.c.l. .....lb. .12 - —
80% (68% fat), dms., c.l..lb. .11½- —
l.c.l. .....lb. .12½- —
Cedarleaf, cs.....lb. 1.10 - 1.40
dms. .....lb. .98 - 1.35
Cedarwood, Southern, dms...lb. .75 Nom.
Celery, bots.....lb. 30.00 -35.00
Chaulmoogra, USP, cns.....lb. .68 - —
Chinawood,[3] dms.....lb. No prices
tanks .....lb. No prices
Cinnamon, bark, bots.....lb. 11.00 -32.00
leaf, dms.....lb. 2.00 Nom.
Citronella, Ceylon, cns.....lb. 1.10 Nom.
dms. .....lb. 1.05 Nom.
Java, cns., dms.....lb. 1.20 Nom.
Clove, makers, USP, cns.....lb. 1.45 - 1.50
dms. .....lb. 1.40 1.45
Coconut,[5] Manila, crude, tanks, lb. No prices
edible, 76°, ret. dms., l.c...lb. No prices
Cod,[5] Newf., dms.....gal. .78 - .80
Codliver,[5] med., USP.....bbl. 85.00 -90.00
Coriander, bots.....lb. 25.00 -30.00
Corn[3], crude, tanks, works..lb. .12¾ Nom.
refd., bbls.....lb. .15½ Nom.
Cottonseed,[5] cooking, bbls...lb. .15¾- —
salad, bbls.....lb. .16 - —
Creosote (see C).
Croton, N.F., cns.....lb. 3.00 - 3.25
Cubeb, USP, cns.....lb. 3.75 - 8.50
Crude (see Petroleum, crude).
Cumin, bots.....lb. 8.00 -12.00
Cypress, bots.....lb. 12.00 - —
Degras (see D).
Dill seed, bots.....lb. No stocks
weed, bots.....lb. 7.00 - 7.25
Dip (see D).
Erigeron, cns. .....lb. 2.25 - 2.35
Eucalyptus, cns. .....lb. .75 - .80
dms. .....lb. .70 - .75
Fennel, sweet, cns.....lb. 2.50 - 2.75
Gaultheria (see Oil, wintergreen leaf)
Geranium, Algerian, rose, cns. lb. 17.00 -18.00
Bourbon, cns.....lb. 17.00 -18.00
Turkish (see Palmarosa).
Grapefruit, cns. .....lb. 1.65 - 2.65
Grapeseed, dom., dms.....lb. .35 - .36
imported, dms. .....lb. .20 - .25
Ginger, dist., bots.....lb. 20.00 -21.00
Guaiac wood, concrete, bots.lb. 4.50 - 4.75
Halibut[5] liver, ref., dms...gal. 73.00 Nom.
Hemlock, cns. .....lb. .95 - 1.15
Juniper, berry, cns.....lb. 15.00 -20.00
wood, tech., cns.....lb. No stocks
Juniper tar, USP XI, dms...lb. .80 - .95
Lard,[5] common, 1, bbls.....lb. .13½- —
2 bbls.....lb. .13¼- —
extra, bbls.....lb. .14¼- —
1, bbls.....lb. .13¾- —
winter, strained, bbls.....lb. .14½- —
prime, burning, bbls.....lb. .15 - —
prime, ined., bbls.....lb. .14¾- —
Laurel, bots.....lb. 5.00 Nom.
Lavandin, cns., 25 lbs.....lb. No stocks
Lavender, flower, French, cns. lb. 7.75 -11.25
garden, cns.....lb. .55 - .70
spike, Spanish, tech., cns..lb. 2.85 - 3.10
dms. .....lb. 2.75 - 3.00
Lemon, Calif., cns.....lb. 3.25 - —
Messina, coppers, cns.....lb. 5.50 Nom.
Terpeneless, Type 1.....lb. 10.75 -17.00
Type 2.....lb. 8.50 -15.00
Uruguay, 10 kilo cans.....lb. 5.50 - 5.75
Lemongrass, native, cns., dms. lb. 3.25 Nom.
Lime, dist., cns.....lb. 13.00 -14.00
expressed, cns.....lb. 15.00 -16.00
Lignaloe, wood, Mexican, cns. cns..lb. 3.50 - 3.75
Brazilian (see Bois de rose).
Linseed,[5] raw, dms., c.l.....lb. .1110- —
l.c.l., 10 to 69.....lb. .1130- —
5 to 9.....lb. .1170- —
less than 5.....lb. .1190- —
tanks .....lb. .1020- —
boiled linseed oil .004 cent over raw.
Lovage, extra fine, bots.....lb. 85.00 - —
Lubricating,[2] at refinery, ex tax, California, neutrals, pale, 200-600 vis., 2¼- 4, tanks. gal. .07¼- .11
red, 200-900 vis., 4-6½ plus, tanks..gal. .07¼- .11½
Group 3, bright stocks, 100-210 D, 0-25 pour, tanks..gal. .19½- .24½
neutral, 150-400 vis., 3-3½, 0-10 pour, tanks..gal. .12¼- .17¾
200-280 vis., 3, 15-25 pour, tanks..gal. .12 - .14¼
Pennsylvania[2], bright stocks, S color, 140-150 vis., 10-25 pour, tanks..gal. .25 - .30½
cylinder oils, 600-630 flash, tanks..gal. .16 - .18
600-650 steam ref'd, tanks.. gal. .15 - .16½
neutral, 70° F., 3 color, 150 vis., 0-25 pour, tanks..gal. .31 - .38½
200 vis., 0-25 pour, tanks. gal. .33- .40½
Mace, dist., cns., dms... ...lb. 3.00 - 3.25
Mandarin, Brazilian, cns.....lb. 8.00 - —
Italian, coppers.....lb. 15.00 -Nom.

Oil, menhaden,[5] crude, tanks, Balto..gal. .60 - —
ref'd alkali, ret. dms.....lb. .1160- .1220
kettle-bodied, ret. dms....lb. .1260- .1320
light-pressed, ret. dms....lb. .1060- .1120
tanks .....lb. .1000- —
Mineral, white (see Oil, white mineral).
Mustard, artif., USP, bots., cns., lb. 1.50 - 1.60
dist., natural, bots.....lb. 9.50 -10.00
Neatsfoot,[6] 15° c.t., bbls...gal. 1.90 - —
20°, bbls.....gal. 1.80 - —
30°, bbls.....gal. 1.60 - —
extra, bbls.....lb. .14 - —
1, bbls.....lb. .13¾- —
prime, bbls.....lb. .14½- —
pure, bbls.....lb. .17¾- —
Neroli, bots.....lb. 200.00 375.00
Nutmeg, dist., cans, dms....lb. 3.00 - 3.25
Oiticica,[5] liquid, dms.....lb. No prices
tanks .....lb. No prices
solid, dms.....lb. No prices
Oleo, 1[5] bbls.....lb. .13¼- —
2, bbls.....lb. .13 - —
Olibanum, bots.....lb. 5.00 - 5.25
Olive,[5] denat., dms.....gal. 4.40 - 4.50
edible, Calif., dms.....gal. 5.00 - 5.30
imported, dms.....gal. 5.50 - 5.85
foots, dms.....lb. .19 Nom.
Sulphonated, 50% (40% fat), dms., c.l..lb. No prices
l.c.l. .....lb. No prices
75% (63% fat), dms., c.l..lb. No prices
l.c.l. .....lb. No prices
80% (68% fat), dms., c.l..lb. No prices
l.c.l. .....lb. No prices
Orange, sweet, dist., cs.....lb. 1.70 - —
expressed, Calif., cns.....lb. 3.00 - —
Argentine, 10-kilo cns....lb. 3.00 - 3.25
Oil, orange, Brazilian, cns....lb. 2.85 - 3.10
Florida, cns.....lb. 2.85 - 2.90
Messina, USP, coppers...lb. 8.00 Nom.
West Indies, cns.....lb. 4.75 - 6.00
terpeneless .....lb. 35.00 -175.00
Origanum, cs. .....lb. 2.85 - 2.90
Palm,[5] Niger, dms.....lb. .09 - .10
Sumatra, tanks.....lb. No prices
distant, ship't, bulk.....lb. No prices
Palmarosa, cns.....lb. 5.25 - 5.50
Paraffin,[2] 320° flash, 60-70 vis., tanks, G. 3..gal. .05½- —
350° flash, 70-80 vis., tanks, G. 3..gal. .05½- —
80-85 vis., bbls., extra, Ind. refy..gal. .12 - —
100-105 vis., bbls., extra, Ind., refy..gal. .14 - —
300° flash, 100-110 vis., tanks, G. 3..gal. .05¾- —
Patchouli, bots., cns.....lb. 5.50 - 6.00
Peanut,[5] crude, tanks, mill..lb. .13 - —
refd., edible, bbls.....lb. .16½- —
Pennyroyal, d .n., cns.....lb. 2.50 - 2.65
import, cns.....lb. 2.40 - 2.50
Peppermint, natural, cns., dms lb. 6.50 - 6.75
redist., USP, cns., dms....lb. 6.75 - 7.00
Perilla,[3] dms.....lb. .2460- —
tanks .....lb. .2380- —
Petitgrain, Paraguay, cns...lb. 1.70 - 1.75
dms. .....lb. 1.65 - 1.70
Pimento berry, cns.....lb. 4.25 - 8.50
leaf, cns.... .....lb. 2.25 - 2.75
Pine, dest. dist., straw-color, dms., divd., E. ports..gal. .74 - —
steam-dist., dms.....gal. 1.00 - —
Pineneedle, Siberian, cns....lb. 2.60 - 2.70

Oil, Bone—Oil, Savory

Oil, putty,[3] bbls., E. Segundo, Richmond, Cal..gal. .22½- —
contracts .....gal. .19½- —
Whiting, Ind.....gal. .28 - —
dms., c.l., Boston, Providence, gal. .25 - —
l.c.l., same basis.....gal. .27 - —
tanks, same basis.....gal. .18 - —
Martinez, Cal.....gal. .28 - —
Rapeseed,[5] tax incl., dms...lb. .15¼- .15½
tax not incl., tanks.....lb. .10 - —
blown, dms.....lb. .17½- .18
Red,[5] dist., or saponif., dms., divd..lb. .12 - .13
tanks, divd.....lb. .11¼- —
West coast prices one cent higher.
Rose, synth., bots.....lb. 4.00 -60.00
natural, coppers.....oz. 28.00 -30.00
Rosemary, Spanish, cns.....lb. 1.85 - 1.90
dms. .....lb. 1.80 - 1.85
Rosin, 1sr rectified, dms....gal. .48 - —
2d rectified, dms.....gal. .50 - —
3d rectified, dms.....gal. .54 - —
Rue, bots.....lb. 7.25 - —
Sage, cns.....lb. 2.10 - 2.20
Sandalwood, domestic, distilled, UP, cns..lb. 5.85 - 6.00
Mysore, cns., case lots.....lb. 6.00 - 6.25
Sardine, crude, fut., tanks, Pac. Cst..gal. .60 - —
refd., alkali, ret. dms.....lb. .1160- .1220
kettle-bodied, ret. dms....lb. .1260- .1320
light, pressed, ret. dms...lb. .1060- .1120
tanks .....lb. .1000- —
Sassafras, artif., cns.....lb. No prices
natural, dom., cns., dms...lb. 1.05 - 1.20
Savin, cns..... .....lb. No stocks
Savory, cns.....lb. No stocks

THUMBS UP!

In the all-out determination to carry on our war effort it is more than ever important for American industry to carry on.

Providing employment and paying its share of taxes, the American soap and cosmetic industry has an important position in the economic setup of America.

The Aromatics Division of the General Drug Co. is devoting all of its resources to continously provide the soap and cosmetic manufacturer with high quality full strength material at a fair price.

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GENERAL DRUG COMPANY

644 Pacific St., Brooklyn, N. Y.

9 S. CLINTON ST., CHICAGO TRANSPORTATION BLDG., LOS ANGELES

1019 ELLIOTT ST., W., WINDSOR, ONT.

Oil, Seal—Pet. Lacquer, Oil

Oil, seal, tanks....gal. .72 - —
Shark[5] liver, crude, dms. million vitamin units. No prices
Shingle stains, bbls., c.l., works. gal. .19 - —
l.c.l., works....gal. .20 - —
tanks, works....gal. .14 - —
Snakeroot, Canada, cns.....lb. 8.50 -10.00
Soybean, dom., crude, dms..lb. .12¾ Nom.
tanks....lb. .12 Nom.
refd., dms....lb. .14 Nom.
tanks....lb. .13¼ Nom.
Spearmint, dms....lb. 3.25 - 3.50
Sperm[5], bleach, 38°, dms....lb. .1270- —
45°, dms....lb. .1200- —
natural, dms....lb. .1150- —
Spruce, cns., dms....lb. .95 - 1.15
Sweet, birch, North, cns.....lb. 3.00 - 4.00
South, cns....lb. 2.25 - 2.50
Tall, crude, dms., c.l., works. ton.40.00 - —
l.c.l., works....ton.45.00 -50.00
tanks, works....ton.30.00- —
distilled, dms., c.l., dlvd...lb. .05½- .07
l.c.l., dlvd....lb. .06½- .08¼
tanks, dlvd....lb. .05 - .06¾
refined, dms., c.l., works...lb. .04 - —
l.c.l., works....lb. .04½- —
tanks, works....lb. .03½- —
Tallow,[5] acidless, bbls.....lb. .13½- —
tanks....lb. .13 - —
Oil, tansy, cns....lb. 3.55 - 4.25
Tar, pine, com'l, dms., c.l., dlvd. E. cities..gal. .32½- —
E. ports, c.l....gal. .32 - —
l.c.l....gal. .34½- —
tanks, dlvd. E. cities..gal. .24 - —
rectified., USP, bbls., l.c.l., dlvd. E. ports..gal. .60 - —
Tar acid (see T).
Teaseed,[5] crude, dms.....lb. .30 - —
refined, dms.....b. .32 - —
Tea tree (see Oil, Ti tree).
Thyme, NF, red, cns.....lb. 1.85 - 2.20
white, cns.....lb. 1.95 - 2.35
Tung (see Oil, Chinawood).
Ti tree, cns.....lb. 2.50 - 2.65
Turkey red (see castor, sulphonated).
Turpentine (see T).
Turtle, cns.....gal. 8.50 - —
Vetiver, Java, bots.....lb.28.00 -30.00
Whale, ref., natural, dms...lb. .1070- —
winter, bleach, dms.....lb. .1110- —
Wheat germ, dms., cont., dlvd., 100 gal..gal.10.00 - —
dms., 50 gal.....gal.11.50 - —
dms., 25 gal.....gal.12.50 - —
dms., 10 gal.....gal.13.50 - —
dms., 5 gal.....gal.14.00 - —
cns., 1 gal.....gal.15.00 - —
White[5], mineral, dms 50-60 vis., dms..gal. .41 - .49
65-75 vis., dms.....gal. .42 - .50
80-90 vis., dms.....gal. .43 - .52
Oil, white, mineral, USP, 80-90 vis., dms..gal. .45 - .54
95-105 vis., dms.....gal. .50½- .59½
125-135 vis., dms.....gal. .56 - .63
140-150 vis., dms.....gal. .58 - .60
175-185 vis., dms.....gal. .61½- .70½
200-210 vis., dms.....gal. .64½- .73½
320-330 vis., dms.....gal. .72 - .81
335-345 vis., dms.....gal. .73 - .82
Russian, 80-90 vis., dms.gal. No prices
145-155 vis., dms.....gal. No prices
175-185 vis., dms.....gal. No prices
335-345 vis., dms.....gal. No prices
Wintergreen, natural, North, cns..lb. 4.75 - 6.00
South, cns....lb. 3.50 - 3.85
synth (see Methyl salicylate).
Wood (see Oil, chinawood).
Wormseed, cns.....lb. 2.85 - 3.25
Wormwood, cns.....lb. 4.50 - 5.00
Ylang-ylang, Bourb., bots., cns. lb.20.00 -24.00
Manila, bots.....lb.35.00 -40.00
Olivine, aggregate c.l., mines, ton. 7.00 -11.00
Lumps, same basis....ton. 7.00 - —
Spalls, same basis....ton. 5.00 - —
crushed, 8 mesh, bulk, c.l., works..ton. 8.00 - —
paper bags, c.l., wks..ton. 9.50 - —
ground, 325 mesh, c.l., mines. ton.20.00 - —
200 mesh, c.l., mines....ton.17.00 - —
100 mesh, c.l., mines....ton.15.00 - —
20 mesh to dust.....ton.12.00 - —
Opium gum, USP, 50-lb. lots, cns..lb.13.00 - —
25-lb. lots, cns.....lb.13.25 - —
5-lb. lots, cns.....lb.13.50 - —
1-lb. lots, cns.....lb.13.63 - —
Prices on powd. and gran. USP opium are $1.50 per pound higher.
Orange, Lake, Persian, bbls...lb. .30 - .45
Mineral, Amer., bbls., 5 tons, dlvd., Ala., Ark., Cal., Fla., Ga., La., Miss., Okla., Tex., and W. of Cascade Mts. in Ore. and Wash..lb. .11½- —
Ariz., Idaho, Nev., Utah and E. of Cascade Mts. in Ore., Wash., lb. .11½- —
Colo., Mont., N. M., Wyo..lb. .11¾- —
5 bbls., dlvd., other points. lb. .11¼- —
smaller lots, dlvd., Ala., etc..lb. .12 - —
Ariz., etc.....lb. .12½- —
Colo., Mont., N. M., Wyo..lb. .12¼- —
Other points.....lb. .11¾- —
French, Tours, casks, ex dock, lb. No prices
kgs., ex dock.....lb. No prices
Molybdate, bbls.....lb. .31 - —
Toner, bbls.....lb. .80 - 1.05
Orangeflower petals, cs.....lb. .45 - .50
Orange peel, bitter, bbls.....lb. .32 - .33
sweet, bls.....lb. .15 - .17
Haitian, bgs.....lb. .09 - .10
Orris root, Florentine, bgs....lb. 2.75 - 3.50
fingers, cs.....lb. No stocks
powd., bbls., bxs.....lb. 2.75 - 3.50
Verona, bls.....lb. 2.50 - 3.25
powd., bgs., cns.....lb. 2.75 - 3.50
Orthoamylphenol, l.c.l., dms., works..lb. .25 - —
Orthoanisidin, bbls.....lb. .70 - —
Orthochloranilin, dms.....lb. .60 - .70
Orthochlorophenol, dms.....lb. .32 - —
Orthocresol, dms., c.l., works..lb. .17 - .17½
l.c.l., same basis.....lb. .17½- .18
Orthodichlorobenzene, dms., c.l., works, frt. alld. E. of Rockies..lb. .06 - .07¼
l.c.l., same basis.....lb. .07 - .08½
100-lb. tins, same basis.lb. .08 - .09
50-lb. tins, same basis..lb. .09 - .10
tanks, same basis.....lb. .05½- .06½
Orthodichlorobenzene prices west of Rockies, 1c. per lb. higher.
Orthonitroanilin, dms.....lb. .45 - —
Orthonitrochlorobenzene, dms..lb. .15 - .16
Orthonitroparachlorophenol, cns.lb. .75 - —
Orthonitrotoluene, dms.....lb. .09 - —
Orthophenetidin, dms.....lb. .82 - —
Orthotoluidin, dms.....lb. .19 - —
Osage orange, crystals, bgs....lb. .23 - —
extract, bbls., No. 1.....lb. .11 - —
No. 2..lb. .10 - —
Oxyquinolin sulphate, cns., 100-lbs., works..lb. 3.50 - —
bots., cns., 1-50 lbs.....lb. 3.75 - 4.15

P

Papain, powd., cs.....lb. 2.75 - 3.00
Paprika, Algerian, bgs.....lb. .35 - .40
Portuguese, extra fancy, bgs.lb. .54 - .55
good, bgs.....lb. .32 - .33
Spanish, extra fancy, cs.....lb. .55 - .56
medium, cs.....lb. .52 - .54
Parachlorophenol, dms.....lb. .32 - —
Paracymene, refd., dms.....gal. .75 - 1.25
Paradichlorobenzene, dms., c.l.lb. .11 - .13
l.c.l.....lb. .12½- .15
Paraffin,[1] crude scale, 122-124 A.M.P., bbls., 10,000 lbs., f.o.b. seller's shipping point, freight equalized with Whiting, Ind.; N.Y.C.; Phila., Pa.; New Orleans; Baton Rouge, La., and Texas Gulf ports..lb. .04¼- —
124-126 A.M.P., bbls., same basis..lb. .04¼- —
129-131 A.M.P., bbls., same basis..lb. .04¾- —
132 or higher A.M.P., bbls., same basis..lb. .05¼- —
fully refined, 120-122 A.M.P., bbls., slabs, loose, same basis..lb. .05 - —
123-125 A.M.P., slabs, loose, same basis..lb. .0520- —
125-127 A.M.P., slabs, loose, same basis..lb. .0520- —
128-130 A.M.P., slabs, loose, same basis..lb. .0560- —
130-132 A.M.P., slabs, loose, same basis..lb. .0585- —
131-133 A.M.P., slabs, loose, same basis..lb. .0585- —
133-135 A.M.P., slabs, loose, same basis..lb. .0615- —
135-137 A.M.P., slabs, loose, same basis..lb. .0640- —
138-140 A.M.P., slabs, loose, same basis..lb. .0715- —
143-145 A.M.P., slabs, loose, same basis..lb. .0810- —
149-151, A.M.P., slabs, loose, same basis..lb. .10½- —
semi-refined, 122-124 A.M.P., bbls., same basis..lb. .04¼- —
124-126 A.M.P., bbls., same basis..lb. .04¼- —
Paraffin, semi-refined, 128 or higher A.M.P., bbls., same basis..lb. .05¼- —
Paraffin wax, crude scale and semi-refined prices are $0.0005 per lb. less than the above for tankcar delivery; for delivery of smaller than 10,000 pounds prices are $0.015 per lb. higher than the above. For paraffin packed in bags prices are $0.004 per lb. higher than the above.
Paraformaldehyde,[3,5,6] dms., 1,000 lbs. or more, shipments, f.o.b. Perth Amboy, Philadelphia, or N.Y.C..lb. .23 - —
100 to 900 lbs., shipments, same basis..lb. .24 - —
Paraldehyde, tech., 98%, 55 and 110-gal. dms., l.c.l., works..lb. .12 - —
5 and 10-gal. dms., works..lb. .15 - —
USP, cns., cbys.....lb. .37 - .45
Paranitrophenol, kgs.....lb. .35 - —
Paranisidine, dms.....lb. .75 - —
Paranitroanilin, kgs., works...lb. .45 - —
Paranitrochlorobenzene, kgs...lb. .15 - —
Paranitrotoluene, kgs.....lb. .30 - —
Paraphenylenediamine, bbls....lb. 1.25 - 1.30
Paratoluenesulphonamide, bbls.lb. .70 - —
Paratoluidin, bbls.....lb. .48 - —
Pareira brava root, bls.....lb. .20 - .21
Paris green, dealer, dms., kegs, c.l., f.o.b. wks., frt. alld..lb. .24 - .26
l.c.l., same basis.....lb. .25 - .27
Passion flower, herb, bls.....lb. .06 - .07
Patchouli leaves, bls.....lb. .28 - .30
Pectin, 200 lb. bbls.....lb. .75 - —
Pellitory root, bls.....lb. .30 - .32
Pennyroyal leaves, bls.....lb. .15 - .16
Pentachlorophenol, dms., works. lb. .20 - .25
Pentaerythritol, C.P., bbls., dlvd. lb. .75 - —
less than barrel lot.....lb. 1.00 - —
tech., bbls., dlvd.....lb. .33½- .35½
less than barrel lots.....lb. .40 - —
Tetra acetate, bbls., dlvd....lb. 1.00 - —
less than barrel lot.....lb. 1.50 - —
Pentanes,[2] 28°-38° C., industrial grade, dms., c.l., G.3, gal. .11 - —
l.c.l., G.3.....gal. .19 - —
tanks, G.3.....gal. .08½- —
laboratory grade, dms., c.l., G.3..gal. .16 - —
l.c.l., G.3.....gal. .29 - —
10 gal., G.3.....gal. .55 - —
Pepper, black,[1] Alleppey, bgs..lb. .08½- .09
Lampong, bgs.....lb. .06½- .07
Tellicherry, bgs.....lb. .08½- .09
white[1], Java, bgs.....lb. .11 - .11½
small berry, bgs.....lb. .10 - .10½
red, chillies, Japan, Hontaka..lb. .40 - .41
Mombassa, bgs.....lb. .27 - .28
Sierre Leone, bgs.....lb. .23½- .24
Peppermint leaves, dom., bls..lb. .65 - .70
import, bls.....lb. 1.10 - 1.15
Perchlorethylene,[3] dms., c.l., works, frt. alld., zone 1, lb. .08 - —
l.c.l., same basis.....lb. .08½- —
Zone 2, dms., c.l., works, frt. alld..lb. .08½- —
l.c.l., same basis.....lb. .09 - —
Zone 3, dms., c.l., works, frt. alld..lb. .09 - —
l.c.l., same basis.....lb. .09½- —
Zone 4, dms., c.l., f.o.b. stock points..lb. .09 - —
l.c.l., same basis.....lb. .09½- —

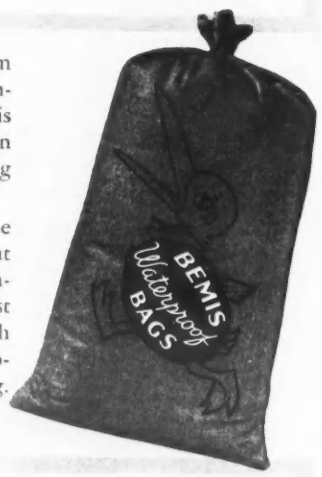
All prices on perchlorethylene are frt. alld. with the exception of Zone 4, in which case the prices indicated are based on f.o.b. L. A., Cal.; S. F., Cal.; Portland, Ore., and Seattle, Wash. Zone 1 includes the following states:—Conn., Md., N. Y., Va., Ky., Me., N. J., Vt., W. Va., Mo., N. H., Tenn., Ind., Ia., Pa., R. I., Ill., Mich., Minn., Wis., Del., Mass., N. C., O., Omaha, Neb.; Kansas City, Kansas. Zone 2 includes Ala., Kan., except Kansas City; N. D., Ga., Neb., except Omaha; S. D., Miss., Ark., S. C., La., Okla., and Fla. Zone 3 includes Colo., N. M., Wyo., Texas and Eastern Montana. Zone 4 includes Arizona, Western Montana, Idaho, Ore., Nev., Wash., Utah and Cal.

Peru, balsam, dms.....lb. 1.25 - 1.30
Petrolatum,[2] amber, dms.....lb. .03½- —
l.c.l.....lb. .04½- —
amber, extra, dms.....lb. .03¾- —
l.c.l.....lb. .04¾- —
white, cream, dms., c.l.....lb. .05 - —
l.c.l.....lb. .06½- —
lily, dms., c.l.....lb. .05¾- —
l.c.l.....lo. .07¼- —
snow, dms., c.l.....lb. .06½- —
l.c.l.....lb. .08 - —
Petroleum,[3] crude, bulk, at wells— California.....bbl. .68 - 1.53
Petroleum, crude, bulk, at wells:—
Central West—
Illinois.....bbl. 1.22 - 1.37
Michigan.....bbl. 1.24 - 1.44
Indiana.....bbl. 1.22 - —
East Texas.....bbl. 1.25 - —
Gulf Coast.....bbl. 1.06 - 1.48
Louisiana, Arkansas.....bbl. .94 - 1.36
Midcontinent (Oklahoma, Kansas, North Texas).....bbl. .75 - 1.25
Pennsylvania, Ohio, West Virginia—
Bradford, Allegany.....bbl. 2.75 - —
Corning.....bbl. 1.31 - —
N. Y. Transit lines.....bbl. 2.75 - —
Eureka lines.....bbl. 2.34 - —
S. W. Penn lines.....bbl. 2.40 - —
Lower district in National Transit lines..bbl. 2.63 - 2.68
Rocky Mountains.....bbl. .96 - 1.20
South Central and Southwestern Texas..bbl. 1.03 - 1.50
Texas Panhandle, W. Texas and N. Mexico..bbl. .70 - 1.15
Ether laboratory grade, 30-60°C., c.l..gal. .18 - —
l.c.l.....gal. .29 - —
10 gals.....gal. .55 - —
35-60°C., l.c.l.....gal. .29 - —
10 gals.....gal. .55 - —
40-75°C., c.l.....gal. .16 - —
l.c.l.....gal. .29 - —
10 gals.....gal. .55 - —
Petroleum ether prices are spot quotations, f.o.b. Group 3, for material packed in drums.
Lacquer diluent at refinerp:—
California, 100 l.b.h., 200 e.p., tanks, dlvd., Los Angeles..gal. .11 - —
San Francisco..gal. .11½- —
Willbridge, Ore., Fort Welles, Wash..gal. .12 - —
East Coast, N. Y., tanks, gal. .11 - —
N. J., tanks.....gal. .11 - —
Group 3, toluol type, tanks, gal. .07¾- .08½
Benzol type, tanks..gal. .07⅞- .08¾

PROTECTION AGAINST VERMIN

Products in Bemis Waterproof Bags seldom are damaged by vermin. Since such pests cannot smell the contents through a Bemis Waterproof Bag, they are not tempted. Even the materials of a Bemis Waterproof Bag are objectionable to vermin!

These Bemis Shipping containers can be made to keep moisture in and dampness out—retain desirable aromas and repel objectionable odors—shut out dust and dirt—resist acids and grease. And because of their strength and toughness, Bemis Waterproof Bags provide extra protection against rough handling.



WATERPROOF DEPARTMENT

BEMIS BRO. BAG CO.

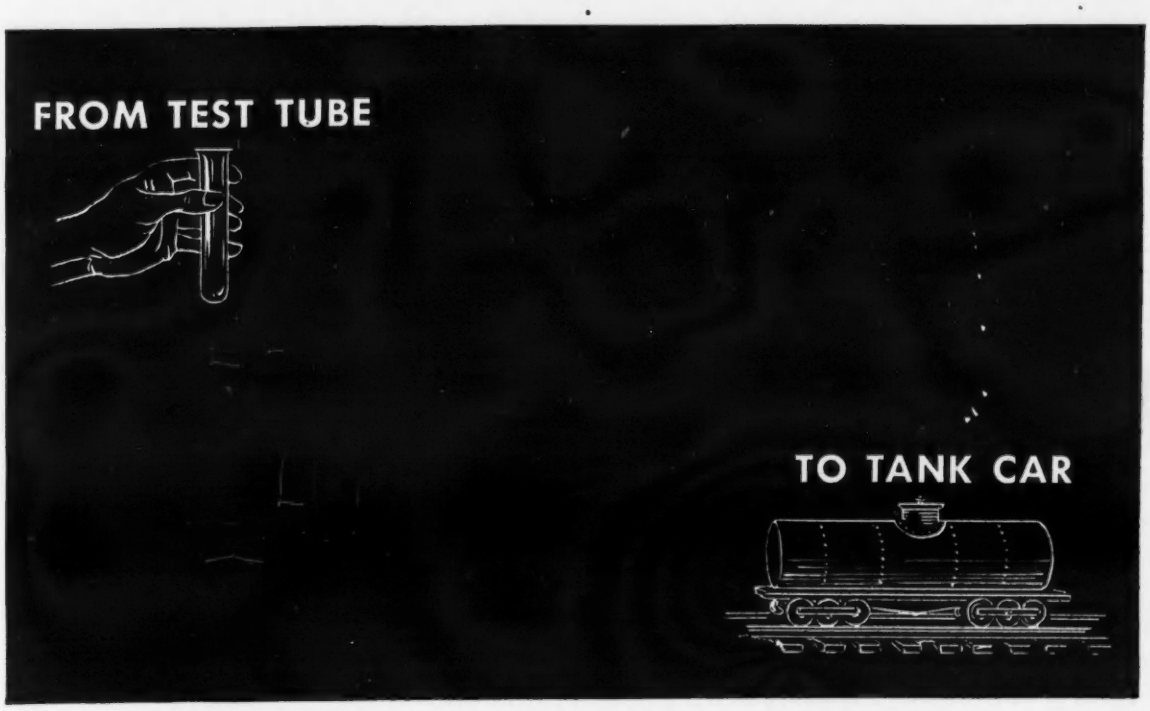
ST. LOUIS, MO. • BROOKLYN, N. Y.

Petroleum, mineral spirits at refinery, California (f.o.b. San Francisco), 166-252 b. r., tanks..gal. .10½- —
198-290 b.r., tanks...gal. .10¼- —
246-397 b.r., tanks...gal. .10⅛- —
312-408 b.r., tanks...gal. .09 - —
362-458 b.r., tanks...gal. .09 - —
East Coast, N. Y., tanks, gal. .09½- —
N. J., tanks.....gal. .09⅛- —
Group 3, tanks.....gal. .06½- —
Gulf Coast, tanks.....gal. .06½- —
tankwagon:—
Albany .....gal. .13½- —
Baltimore (100 gals.)..gal. .14 - —
25-99 gals.....gal. .10 - —
Boston .....gal. .11½- —
Bound Brook, North Amboy, N. J..gal. .10½- —
Bridgeport, Conn.....gal. .11½- —
Buffalo .....gal. .15½- —
Camden, N. J.....gal. .10½- —
Chicago .....gal. .1670- —
Decatur .....gal. .1810- —
Des Moines.....gal. .1790- —
Evansville, Ind.....gal. .1420- .1520
Milwaukee .....gal. .1930- —
Minneapolis-St. Paul..gal. .19½- —
Newark .....gal. .10½- —
New York (200 gal.)..gal. .10½- —
Omaha .....gal. .12½- —
Pittsburgh .....gal. .11½- .13½
Providence .....gal. .12 - —
Rochester .....gal. .12½- —
St. Louis.....gal. .1470- —
Syracuse .....gal. .10½- —
Trenton .....gal. .10½- —
Wilmington, Del.....gal. .12½- —
Naphtha,cleaners, at refinery:—
California f.o.b. San Francisco), tanks..gal. .12 - —
East Coast, N. Y., tanks, gal. .10½- —
N. J., tanks.....gal. .10½- —
Group 3, tanks.....gal. .07⅛- —
Gulf Coast (f.o.b. New Orleans). tanks..gal. .06¾- —
tankwagon, Boston, ex tax. gal. .12½- —
Bridgeport .....gal. .13½- —
Chicago, inc. 4c. tax...gal. .18 - —
Decatur, inc. 4c. tax...gal. .1910- —
Des Moines, inc. 4c. tax, gal. .1890- —
Evansville, inc. ex tax.gal. .15 - .16
Milwaukee, inc. 5c. tax.gal. .2030- —
Minneapolis-St. Paul, inc. 5c. tax..gal. .20½- —
Newark, ex tax.....gal. .10½- —
New York, ex tax....gal. .11½- —
Omaha, ex tax.....gal. .1490- .1590
Oklahoma City, ex tax.gal. .16½- —
Philadelphia, ex tax...gal. .12 - —
St. Louis, inc. 1c. tax.gal. .15½- —
Syracuse, 150 gals.....gal. .14½- —
high-solvency, aromatic, No. 1, over 70% arom., tanks, f.o.b. Bayway..gal. .21½- —
No. 2, over 90% arom., same basis..gal. .21½- —
3, same basis.....gal. .22½- —
8, tanks, f.o.b. Wilmington, Cal..gal. .14 - —
30, same basis.....gal. .13½- —
40, same basis.....gal. .13½- —
V.M.& P., at refinery:—
California, 46.5, 254 l.b.p., 380 e.p., tanks, f.o.b. El Segundo..gal. .11 - —
Richmond .....gal. .11½- —
Willbridge, Ore., Pt. Wells, Wash..gal. .12 - —
54-57, 190 l.b.p., 310 e.p., tanks, dlvd. Los Angeles..gal. .10 - —
San Francisco....gal. .10½- —
Portland, Seattle..gal. .11 - —
East Coast N. Y., tanks, gal. .10½- —
N. J., tanks.....gal. .10½- —
Group 3, tanks.....gal. .07⅛- —
Gulf Coast (dlvd. New Orleans), tanks..gal. .06½- —
tankwagon, Boston, ex tax, gal. .12½- —
Chicago, inc. 4c. tax..gal. .17 - —
Des Moines, inc. 4c. tax, gal. .1890- —
Decatur, inc. 4c. tax..gal. .1910- —
Evansville, Inc., ex tax. gal. .1520- .1620
Milwaukee, inc. 5c. tax.gal. .2030- —
Minneapolis-St. Paul, inc. 5c. tax..gal. .20 - —
Newark, ex tax.....gal. .11½- —
New York, ex tax....gal. .10½- —
Omaha, ex tax.....gal. .1490- .1590
Philadelphia, ex tax...gal. .13 - —
St. Louis, inc. 1c. tax..gal. .1570- —
Solvent, rubber, at refinery, California (f.o.b. San Francisco)..gal. .24 - —
East Coast, N. Y., tanks, gal. .10½- —
N. J., tanks.....gal. .10½- —
Group 3, tanks.....gal. .07⅛- —
Stoddard (CS 8-33), at refinery:—
California (f.o.b. San Francisco), tanks..gal. .11 - —
East Coast, N. Y., tanks, gal. .09½- —
N. J., tanks.....gal. .09½- —
Group 3, tanks.....gal. .06¾- —
Tankwagon, Boston, ex tax. gal. .11½- —
Chicago, inc. 4c. tax..gal. .1640- —
Decatur, inc. 4c. tax..gal. .1860- —
Des Moines, inc. 4c. tax. gal. .1840- —
Evansville, Ind., ex tax. gal. .14 - .15
Milwaukee, inc. 5c tax. gal. .1980- —
Minneapolis-St. Paul, inc. 5c. tax..gal. .1820- —
Newark, ex tax.....gal. .09½- —
New Orleans, ex tax..gal. .11 - —
New York, ex tax.....gal. .10½- —
Omaha .....gal. .1360- .1450
Philadelphia, ex tax...gal. .13 - —
St. Louis, inc. 1c. tax..gal. .1340- —
Tulsa, ex tax.....gal. .10½- .11½
Phenobarbital, 5lb. bots.....lb. 4.35 - —
bots. or cns., 100 lbs., spot or contract..lb. 4.00 - —
25-lb. cns.....lb. 4.25 - —
Phenol,[7] USP, cms., c.l., works, frt. equald..lb. .12½- —
l.c.l., same basis.....lb. .13¼- —
under 1,000 lbs.....lb. .14¼- —
tanks, works.....lb. .11½- —
Phenolphthalein, USP, bbls.,cms., 2,000-lb. lots..lb. .85 - —
bbls., dms., kegs, 100-250 lbs. lb. .87 - .89
yellow, fib. dms., 2,000-lb. lots. lb. .80 - —
100-lb. fib. dms.....lb. .82 - —
25-lb. dms.....lb. .87 - —
50-lb. kgs.....lb. .84 - —
Phenyl chloride, dms.....lb. .17 - —
Phenylacetaldehyde, bots.....lb. 5.00 - 6.00
dimethylacetate, cns.....lb.14.50 -15.00
Phenyl ethyl acetate, cns.....lb. 2.90 - 3.50
Phenylethylphenyl acetate, bots. lb. 8.00 -15.00

Phenylhydrazine, base, CP, bots. lb. 4.55 - —
hydrochloride, CP, bots., works. lb. 7.10 - —
commercial, kgs., works.....lb. 1.75 - —
Phloroglucinol, CP, tins, wks..lb.20.00 -22.00
tech., tins, works.....lb.15.00 -16.50
Phosphate rock, Fla., high-grade, hard, 77%-76%.....long ton. 5.00 - —
land pebble, 68%-66%.long ton. 2.00 - —
70%-68% .....long ton. 2.40 - —
72%-70% .....long ton. 3.00 - —
75%-74% .....long ton. 4.00 - —
Tenn., 72%-70%.....long ton. 5.00 - —
75%-74% .....long ton. 6.00 - —
Phosphate rock prices are for shipment in bulk, f.o.b. mines.
Phosphorus, red, cs.....lb. .40 - .44
yellow, dms.....lb. .18 - .20
cases .....lb. .23 - .25
Oxychloride,[3] cyls.....lb. .15 - .18
Pentoxide, dms., c.l., works..lb. .11 - .12
l.c.l., dms., works.....lb. .13 - .14
Sesquisulphide, cs.....lb. .38 - .42
Trichloride, cyls.....lb. .15 - .16
Phthalamide, bbls., wks., ton..lb. .35 - —
single, bbls., works.....lb. .40 - —
kgs., works.....lb. .45 - .50
Phthalic anhydride,[8] bbls., c.l., works, frt. alld. E. of Miss. R..lb. .14½- —
l.c.l., same basis.....lb. .15½- —
Pichi leaves, bgs.....lb. .08 - .09
Pilocarpine hydrochloride, bots., vis..oz. 4.00 - 5.25
Nitrate, bots., vis.....oz. 3.85 - 5.50
Pimento, Jamaica, bgs.....lb. .22½- .23
Mexican (see Allspice, Mexican).
Pinkroot, bls.....lb. .55 - .60
Pitch, burgundy (see E).
Coaltar, 160° m.p., bbls., c.l., works..ton.19.00 - —
l.c.l. .....ton.22.00 - —
hardwood, 1-time dms., c.l., dlvd. Akron..ton.23.75 -24.00
Linseed, dms.....lb. .05 - .05¼
Petroleum (see Asphaltum, Mexican, Texas).
Pitch, pine, bbls.....bbl. 6.75 - 7.00
Plaster of paris (see Gypsum).
Pleurisy root, Southern, bls...lb. .12 - .13
Podophyllin, dms., 100-lb. lots, dlvd. E. of Miss..lb. 7.65 - —
Poke root, bls.....lb. .09 - .10
Polyamyl naphthalene, l.c.l., dms., works..lb. .25 - —
Pomegranate bark, bgs.....lb .49 - .50
Root bark, bgs.....lb. .60 - .65
Poppy flowers, red, bls.....lb. .70 - .75
Seed, Dutch, bgs.....lb. .62 - .64
Indian, white, bgs.....lb. .10½- .11
Turkish, bgs.....lb. .42 - .43
Potash abietate.....lb. .08 - —
Acetate, USP, bbls., 250 lbs..lb. .28 - —
cns., 25 lbs.....lb. .31 - .44
Arsenite, USP, solut., 100-lb. lots, cbys., demijs..lb. .13 - .15
Bicarbonate, USP, cryst., bbls., 300 lbs..lb. .14 - —
gran., bbls., 250 lbs.....lb. .14 - —

Pet., Mineral, Spt.—Pot. Chlor.

Potash, bichromate,[3,5] spots, c.l., works..lb. .09¾- —
6 casks or 10 bbls., or over, works..lb. .09¾- —
5 casks or 9 bbls., or less, works..lb. .10 - —
Bromide, USP, gran., bbls., 500 lbs..lb. .27 - .31
kgs., 100 lbs.....lb. .28 - .32
Carbonate, calc., dms., c.l., works..lb. .06½- —
l.c.l., same basis.....lb. .06¾- —
hydrated, 83-85%, bbls., c.l., works..lb. .05½- —
l.c.l., same basis.....lb. .05¾- —
liquid, dms., c.l., works, frt. alld..lb. .03 - —
l.c.l., dms., same basis..lb. .03½- —
tanks, same basis.....lb. .02¾- —
USP, gran., bbls., 325 lbs. lb. .14 - .16
powd., bbls., 325 lbs.....lb .19 - —
kgs., 100 lbs.....lb. .21 - —
Caustic, flake, 88-92%, dom., l.c.l., works.....lb. .07¼- —
c.l., works..lb. .07 - —
liquid, 45% basis, dms.....lb. .03½- .03¼
tanks .....lb. .02½- —
solid, 88-92%, dom., dms., c.l., works..lb. .06¼- —
l.c.l. .....lb. .06½- .06¾
Chlorate,[3] cryst., kgs.....lb. .11 Nom.
powd., kgs.....lb. .09¾- .10



It may take anywhere from five to fifteen years for a new chemical to advance from test tube to tank car — from the laboratory into volume production for commercial use.

Post-war conditions are likely to call for widespread utilization of chemical products that now are still in the test tube stage. Because of this, research at

HOOKER

is being accelerated, laboratory facilities have been modernized and expanded, new chemical developments are "in the works". Now is the time for you to call in HOOKER research men to consult with your chemists so that you may solve today your problems of tomorrow.

Check List of HOOKER Chemicals

Caustic Soda
Liquid Chlorine
Bleaching Powder
Muriatic Acid
Hydrogen
Ferric Chloride Solution
Sulfur Dichloride
Sulfur Monochloride
Aluminum Chloride, Anhydrous
Antimony Trichloride, Anhydrous
Arsenic Trichloride, Anhydrous
Monochlorbenzene
Orthodichlorbenzene
Paradichlorbenzene
Trichlorbenzene 1:2:4
Tetrachlorbenzene 1:2:4:5
Tetrachlorbenzene 1:2:3:4
Pentachlorbenzene
Hexachlorbenzene
Monochlortoluene
Ammonium Benzoate
Benzoate of Soda
Methyl Benzoate
Benzoic Acid
Benzoic Anhydride
Benzal Chloride
Benzotrichloride
Benzoyl Chloride
Benzyl Alcohol
Benzyl Chloride
Meta Nitrobenzoic Acid
Meta Nitrobenzoyl Chloride
Para Nitrobenzoyl Chloride
Chlorinated Paraffin
Methyl Dichlor Stearate
Dichlor Stearic Acid
Methyl Stearate
Dibenzyl Disulfide
Alpha Chlor Naphthalene
Dichlor Naphthalene
Polychlor Naphthalenes
Cyclohexanol
Methyl Cyclohexanol
Piperidine
Acetyl Chloride
Butyryl Chloride
Iso Propyl Chloride
Phosgene
Propionyl Chloride
Sulfuryl Chloride
Thionyl Chloride
Chlor Anisidine
2:5 Dichlor Aniline
Sodium Sulfhydrate
Sodium Sulfide
Hydrogenated Fish Oils

HOOKER ELECTROCHEMICAL COMPANY
NIAGARA FALLS, NEW YORK
NEW YORK CITY • TACOMA, WASHINGTON

HOOKER ELECTROCHEMICAL CO

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Potash Chloride—Red, Cadmium

Potash, chloride, tech., 98%, cryst., bgs., kgs..lb. .08 Nom.
Chromate,[8,9] kgs.....lb. .24 - .27
Citrate, USP, gran., 250-lb. bbls., lbs..lb. .33½- —
100-lb. dms.....lb. .34½- —
50-lb. dms.....lb. .35½- —
25-lb. dms.....lb. .37½- —
powd., 3c. per lb higher.
Cyanide, dom., dms., works..lb. .55 - —
Cyanide, gold, 41% gold, bots. works..oz. 14.20 -14.90
Glycerophosphate, 75%, sol., dms., 1,000-lb. lots..lb. 1.50 - —
100-lb. lots.....lb. 1.60 - —
50-lb. lots, cbys. or cns.lb. 1.65 - —
25-lb. lots, cns.....lb. 1.75 - —
Guaiacolsulphonate, fib. dms., 100-lb. lots..lb. 1.75 - —
25 lbs. to 50 lbs.....lb. 1.80 - 1.85
Hydroxide, USP, sticks, cns., 100 lbs. to 1,000 lbs..lb. .32 - .34
Hypophosphite, cns., 100 lbs..lb. .72 - —
25 to 50 lbs.....lb. .75 - —
Iodate, bots., 5 lbs.....lb. 3.46 - —
cns., 25 lbs.....lb. 3.35 - —
Iodide, bots or cns.....lb. 1.44 - 1.88
dms.....lb. 1.35 - 1.38
Kainit, 20%, K_2O, bulk, ex vessel, Atlantic or Gulf ports..ton. No prices
Manure salt, dom., run-of-mine grade, bulk, ex vessel, ports..unit-ton. .60 - —
Potash, manure salt, f.o.b. Carlsbad, N.M..unit-ton. .20 - .21
import, 50%, K_2O, bulk, ex vessel, Atlantic or Gulf ports..ton. No prices
Metabisulphite, kgs.....lb. .18 - .20
Muriate, dom., min. 50% K_2O, bulk, ex vessel, ports.. unit-ton. 56 - .58
60% K_2O, same basis, unit-ton. .53½- —
import, min. 50% or 60% K_2O, bulk, ex vessel, Atlantic or Gulf ports..unit-ton. No prices

Domestic muriate of potash prices, basis f.o.b. Carlsbad, N. M., are 11.2c. per unit of K_2O less than the ex vessel price named above.

Oxalate, pure, cryst., kgs....lb. .40 - .42
tech., bbls., dms.....lb. .28 - .30
Nitrate, crude, bgs., c.i.f. ports. ton. No prices
Perchlorate,[2] kgs., wks.....lb. .09½- .11
Permanganate,[2] tech., dms., works..lb. .19¾- .20¼
USP, dms., wks.....lb. .20½- .21
Prussiate, red, bbls.....lb. No prices
Yellow, spot, bbls.....lb. .17 - .19
Ricinoleate, tech., bbls.....lb. .13 - —
Silicate alkaline, lumps, bgs., lb. .07 - —
Sulphate, NF, powd., 550 lbs., bbls..lb. .15 Nom.
100-lb. kgs.....lb. .17 - —
Prices on granular 4c. higher.
tech., dom., bulk basis, 90%, K_2SO_4, ex vessel, ports..ton.36.25 - —
imp., min., 90%, bgs., ex vessel, Atl. or Gulf ports..ton. No prices
Potash, xanthate, dms., c.l...lb. .12 - —
Sulphocyanide, C.P., dms....lb. .75 - .85
N.F., dms.....lb. .55 - .65
Potash-magnesia, sulphate, dom., bulk, 40%, K_2SO_4, ex vessel, ports..ton.26.00 - —
Potash-soda ferricyanide, dms., works..lb. .40 - .41
Potash titanium oxalate, 350-lb. bbls..lb. .45 - —
100-lb. dms.....lb. .50 - —
Prickly ash bark, bls.....lb. .12 - .13
Berries, bgs.....lb. .25 - .26
Prince's pine herb, bls.....lb. .28 - .40
Procaine, hydrochloride, 25-lb. cns., lb. 8.00 - —
5-lb. cans.....lb. 8.25 - 8.50
1-lb. bots.....lb. 8.75 - —
Propane, industrial grade, tanks, Group 3..gal. .03 - —
Psyllium seed (see Fleaseed).
Pulsatilla, bls.....lb. 1.10 Nom.
Pumice, dom., grd., fine, 4F, 3F, 2F, F, O, bgs., f.o.b. Chicago, 2,000 lbs. and up, lb. .04 - —
600-1,999 lbs.....lb. .04¼- —
100-599 lbs.....lb. .04¾- —
f.o.b. New York, 2,000 lbs. and up..lb. .03¾- —
500-1,999 lbs.....lb. .03¾- —
100- 499 lbs.....lb. .04 - —
coarse, O½, ½, 1, 1½, 2, 3, bgs., f.o.b. Chicago, 2,000 lbs. and up..lb. .04¼- —
600-1,999 lbs.....lb. .04½- —
Pumice, dom., grd., coarse, 100-599 lbs..lb. .05 - —
f.o.b. New York, 2,000 lbs. and up..lb. .03¾- —
500-1,999 lbs.....lb. .03¾- —
100- 499 lbs.....lb. .04¼- —
imp., Italian.....lb. No prices
Pumice stone packed in barrels is ½c. per lb. higher than the above prices.
Pumpkin seed, bgs.....lb. .10 - .11
Purple lake (see Red).
Putty, com'l, dms.....100 lbs. 3.15 - —
linseed oil, raw, dms....100 lbs. 5.00 - —
refined, dms.....100 lbs 5.50 - —
standard, dms.....100 lbs. 4.20 - —
Pyrethrum concentrate, liq. (20 to 1), basis 2 grams pyrethrins per 100 cc., dms., divd..gal. 4.30 - —
(30 to 1), 3 grams pyrethrins per 100 cc., dms., divd..gal. 6.35 - —
Pyrethrum flowers, coarse.. grnd. (g.f.p.) 0.9% pyrethrins, frt. alld., bbls..lb. .21 - .22
fine powd., 0.9% pyrethrins, frt. alld., bbls..lb. .22 - .23
Pyridin, denaturing, dms.....gal. 1.71 - —
refd., 2°, dms.....lb. .46 - —
Pyrites, Spanish, bulk, c.i.f. Atl. ports..unit-ton. No prices
Pyrocatechin, CP, cryst., works, fib. dms., tins..lb. 2.15 - 2.40
resublimed, fib. dms., tins..lb. 4.60 - —
Pyrophylite, standard, 200 mesh, c.l., mines..ton.10.00 - —
325 mesh, same basis.....ton.13.00 - —
No. 3, 200 mesh, c.l., mines.ton. 8.00 - —
325 mesh, same basis.....ton.11.00 - —
Pyroxylin scrap amber, cs., works..lb. .12 - —
black, cs., works.....lb. .10 - —
china white, ivory, cs., works, lb. .13 - —
dense, write, cs., works....lb. .10 - —
gray, cs., works.....lb. .09 - —
mixed, mottles, opaques, cs., works..lb. .04 - —
translucent pastels, cs., works, lb. .10 - —
transparent, cs., works.....lb. .20 - —
colors, cs., works.....lb. .12 - —
shavings, amber, cs., works, lb. .16 - —
colors, mixed, cs., works...lb. .10 - —
white, cs., works.....lb. .15 - —

Q

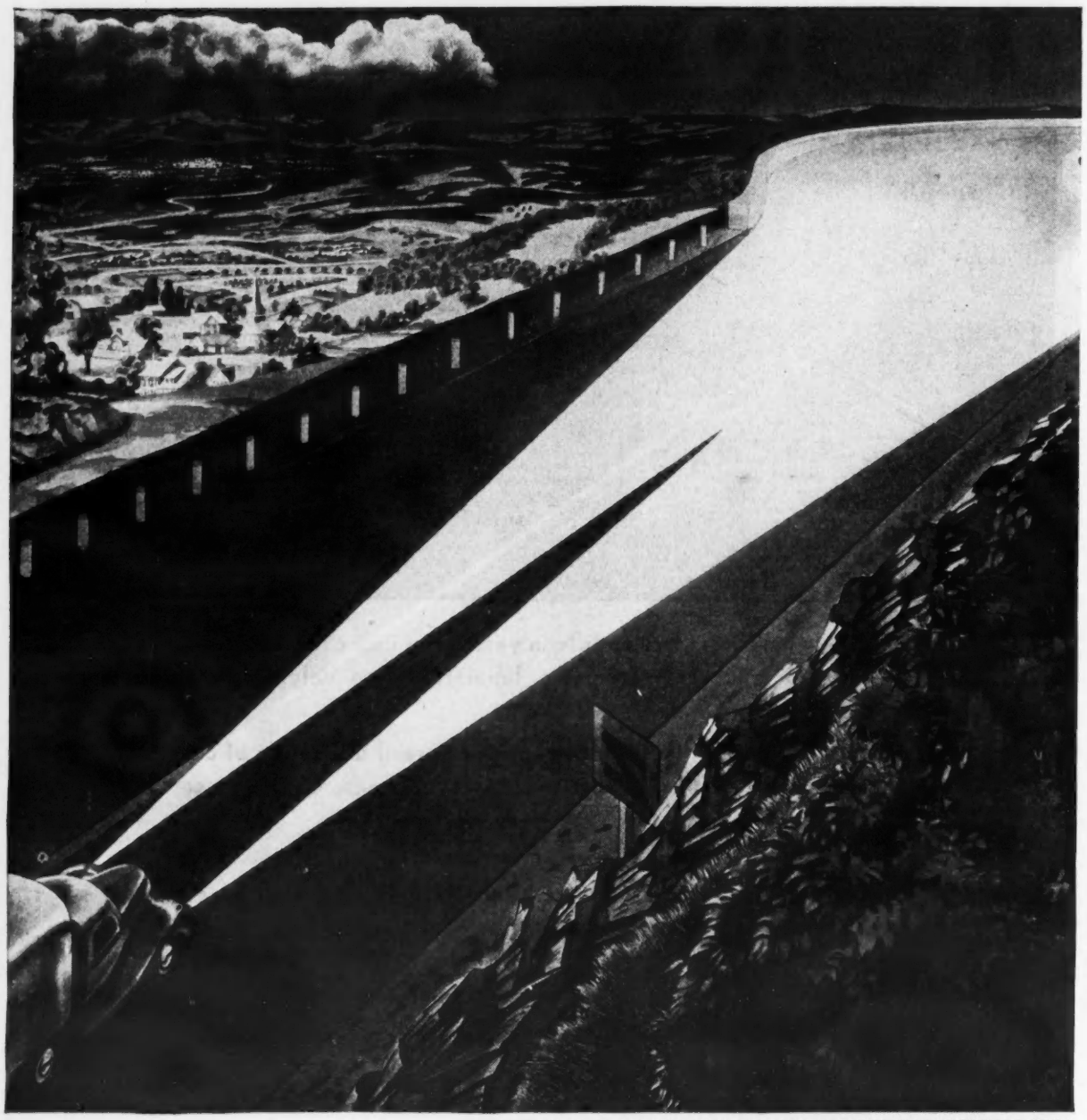
Quassia chips, bls.....lb. .05 - .06
Quebracho extract, liquid, 35% tan, bbls., works..lb. .05¾- —
tanks, works.....lb. .05¼- —
solid, 63%, bgs., c.i., ex dock, plus duty..lb. .04¾- —
clarified, 64%, bgs., c.l., same basis..lb. .05 - —
pwd., bgs., c.l.....lb. .10½- —
l.c.l., bgs.....lb. .11 - —
Queen of the meadow leaves bgs..lb. .07½- .08
Root, bgs.....lb. .10 - .11
Quercitron, crystals, bgs.....lb. .26 - —
extract, bgs., No. 1.....lb. .10 - —
No. 2.....lb. .09½- —
No. 3.....lb. .09 - —
solid, bxs.....lb. .18½- —
Quicksilver,[2,4,6] dom., flasks (76 lbs. net), divd., N.Y..flask.212.00 -215.00
Quince seed, bgs.....lb. 1.35 - 1.60
Quinidine, N.F.V., cryst., cns.oz. 1.06 - —
powd., precip., cns.....oz. 1.01 - —
Sulphate, cns.....oz. .71 - —
Subject to surcharge of 13½c. per oz; see note under Quinine.

Quinine, 100 ozs., cns.....oz. .84 - —
Acetate, cns.....oz. 1.05 - —
Arsenate, cns.....oz. 1.05 - —
Arsenite, cns.....oz. 1.07 - —
Bisulphate, cns.....oz. .60 - —
Citrate, cns.....oz. .78 - —
Dihydrobromine, bots.....oz. .86 - —
Dihydrochloride, bots.....oz. .86 - —
Ethylcarbonate, cns.....oz. 1.25 - —
Ferrocyanide, cns.....oz. 1.07 - —
Formate, cns.....oz. 1.09 - —
Hydrochlorosulphate, cns....oz. .81 - —
Glycerophosphate, cns.....oz. 1.20 - —
Hydrochloride, cns.....oz. .76 - —
Hydriodide, cns.....oz. 1.05 - —
Hypophosphite, cns.....oz. 1.07 - —
Phosphate, cns.....oz. .90 - —
Salicylate, cns.....oz. .79 - —
Sulphate, USP, XI, cns.....oz. .67 - —
Sulphocarbolate, cns.....oz. 1.05 - —
Tannate, cns.....oz. .63 - —
Valerate, cns.....oz. .99 - —
Tartrate, cns.....oz 1.03 - —
Quinine buyers must pay a surcharge of 13½c. per oz. to cover present war risk insurance, ocean freight rates, and additional expenses over the cost of usual business. Changes in these controlling factors will be reflected in the surcharge invoiced.

Quinine-urea hydrochloride, cns.oz. .81 - —
Subject to surcharge of 13½c. per oz; see note under Quinine.

R

R salt, dry, bbls.....lb. .55 - —
paste, dms.....lb. .52 - —
Rapeseed, Argentine, bgs.....lb. .07¾- .08½
Dutch, bgs.....lb. No stocks
Indian, medium, recleaned, bgs., lb. .07¾- .08½
Japanese bgs.....lb. No stocks
Raspberries, dried, bls.....lb. .85 - .90
Red,[2] alizarin lake, bbls., divd. N. of Tenn. and N. C. E. of Miss. R., including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis..lb. 1.10 - 1.90
Red, alizarin lake prices are ½c. higher divd. Ala., Fla., Ga., La. (Shreveport, 1¼c.), Miss., N.C., S.C., Tenn., Tex. (Dallas, Ft. Worth, 1¼c.; El Paso, 2c.), Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1c. higher divd. Pac. Coast for Denver, Pueblo, Salt Lake City, Wichita, prices are equalized with Chicago.
Cadmium, lithopone, deep shade, bbls., ton lots, works, frt. alld..lb. .95 - —
400-2,000 lbs., bbls.....lb. 1.00 - —
100-300 lbs., pkgs.....lb. 1.05 - —
light shade, bbls., ton lots.lb. .80 - —
400-2,000 lbs., bbls.....lb. .85 - —
100-300 lbs., pkgs.....lb. .90 - —
light-medium shade, bbls., ton lots..lb. .85 - —
400-2,000 lbs., bbls.....lb. .90 - —
100-300 lbs., pkgs.....lb. .95 - —



FROM THE ORIGINAL, PAINTED ESPECIALLY FOR NIAGARA ALKALI COMPANY BY FRED FREEMAN

WHEN TWO strong beams of light are focused on a course of progress each serves to strengthen the other and create a single beam of more concentrated power and efficiency. The resources of Niagara Alkali Company and Electro Bleaching Gas Company have thus been centered in one organization on one course to become more powerful, efficient and useful to the industries each has been serving separately. As one closely integrated whole, operating with combined manufacturing, research and personnel facilities, this company now serves the former customers of each under the name of NIAGARA ALKALI COMPANY.

EBG Niagara Alkali Company
60 EAST 42nd STREET, NEW YORK, N. Y.
CAUSTIC POTASH · CAUSTIC SODA
PARA · CARBONATE OF POTASH
Liquid Chlorine

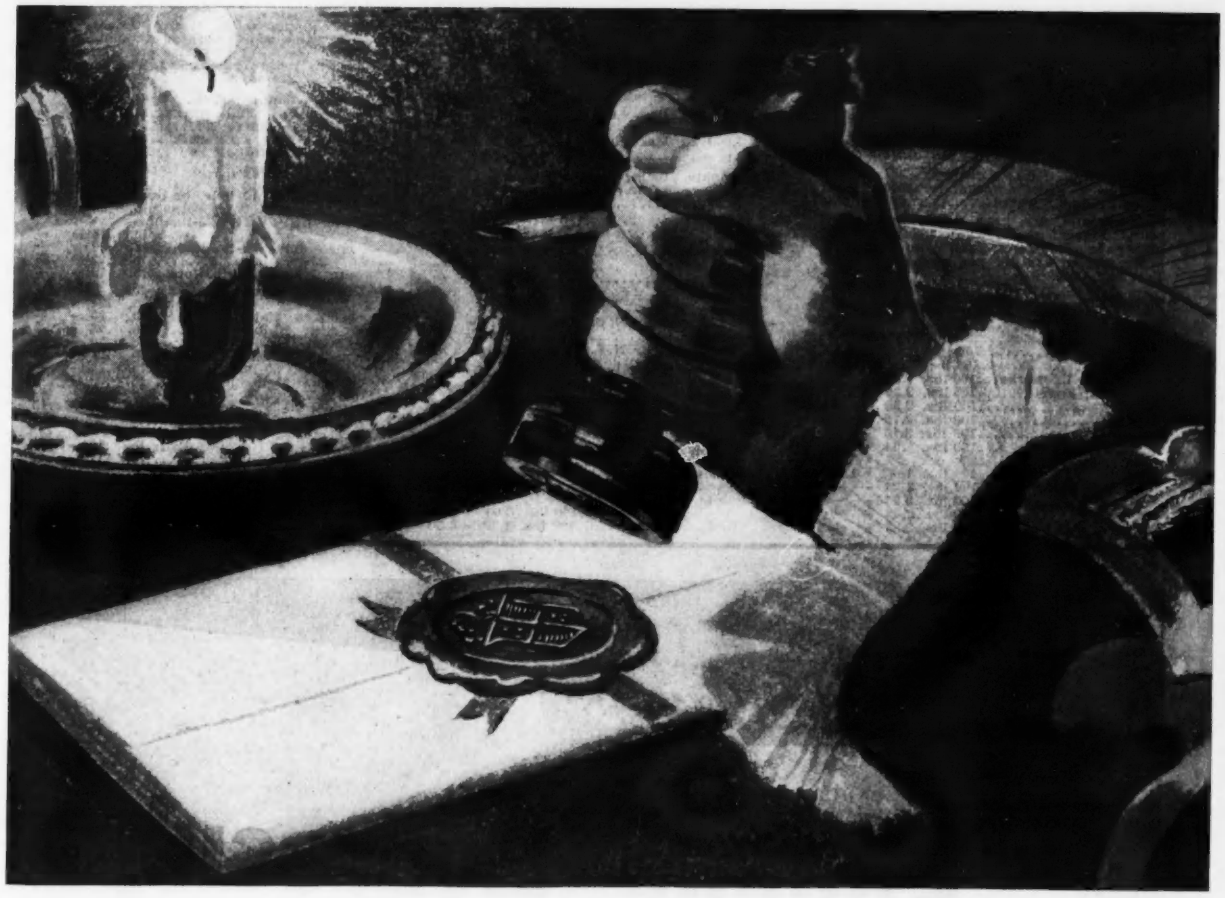
Red, cadmium, lithopone, maroon shade, bbls., ton lots..lb. 1.05 - —
400-2,000 lbs., bbls.....lb. 1.10 - —
100-300 lbs., pkgs.....lb. 1.15 - —
maroon-deep,bbls., ton lots, lb. 1.15 - —
400-2,000 lbs., bbls.....lb. 1.20 - —
100-300 lbs., pkgs.....lb. 1.25 - —
medium shade, bbls., ton lots. lb. .90 - —
400-2,000 lbs., bbls.....lb. .95 - —
100-300 lbs., pkgs.....lb. 1.00 - —

Cadmium, lithopone quotations are f.o.b. Balto. or whse. points, charges prepaid or allowed E. of Rockies.

Selenide, bbls., light, works..lb. 2.35 - —
maroon, works.....lb. 2.90 - —
Carmine, 40, dms., 100 lbs...lb. 4.60 - —
50 lbs.....lb. 4.75 - —
cns., 5 lbs.....lb. 5.25 - —
1 lb.....lb. 5.35 - —
Crocus martis (see Red, purple oxide).
Eosin toner, bbls.....lb. 1.35 - —
Fire toner, bbls.....lb. .85 - —
Indian, pure, bbls., f.o.b. Bethlehem, Easton, E. St. Louis, N. Y..lb. .09¼- —
80-85%, bbls., same basis...lb. .07¾- —
Iron oxide (see Red oxide).
Lacquer maroon, bbls., same basis..lb. 1.25- —
Lake C toner, bbls., same basis, alizarin, lake, contracts..lb. .90 - —
Litho toner, bbls., same basis, alizarin, lake, contracts..lb. .60 - —
Rose, lake, bbls.....lb. .25 - .28
Pink, bbls.....lb. .20 - .25
Lithol-rubine toner, bbls., same basis, alizarin lake, contracts..lb. 1.10 - —
Maroon lake, 25%, kgs., same basis, alizarin lake, contracts..lb. .40 - —
Mercury oxide, tech., bbls., 10,000 lbs..lb. 3.09 - —
smaller lots.....lb. 3.11 - —
Metallic, bbls., Pa., works...lb. .02 - —
Orange, Persian (see O).
Oxide, pure, bbls., c.l., wks..lb. .09 - —
reduced, 85% copperas oxide, bbls., l.c.l., f.o.b. Bethlehem, Easton, E. St. Louis, Copley, Ohio..lb. .08¾- —
80% copperas oxide, bbls., same basis..lb. .08¼- —
Para, toner, concent., kgs., same basis, alizarin lake, contracts..lb. .70 - —
Persian Gulf, oxide, bbls., l.c.l. lb. No prices
Phloxin toner (see Red, Eosin-toner).
Phosphotungstic rhodamine, Y, lgs..lb. 4.15 - —
Purple lake, kgs.....lb. .60 - 1.00
Oxide, bbls., f.o.b. Bethlehem, Easton, E. St. Louis..lb. .03¼- —
Toner, kgs.....lb. 1.50 - 2.00
Scarlet ink toner, kgs., same basis alizarin lake..lb. .55 - —
Lake, kgs., same basis alizarin lake..lb. .35 - —
Spanish oxide, Grade 1, c.l., bbls., f.o.b. N.Y..lb. .04½- —
l.c.l.....lb. .04¾- —
Grade 2, c.l., bbls., f.o.b. N.Y..lb. .04¼- —
l.c.l.....lb. .04¾- —
Toluidin toner, kgs., same basis alizarin lake..lb. 1.05 - —
Tuscan, bbls., f.o.b. N.Y., E. St. Louis..lb. .11 - .40
Venetian, bbls., works.....lb. .0220- —
10%, bbls., works.....lb. .0245- —
15%, bbls., works.....lb. .0265- —
20%, bbls., works.....lb. .02¾- —
25%, bbls., works.....lb. .03 - —
30%, bbls., works.....lb. .03¼- —
35%, bbls., works.....lb. .0360- —
40%, bbls., works.....lb. .04 - —
Vermilion, Amer., bbls., f.o.b. N.Y..lb. .25 - .40
quicksilver, bbls.....lb. 3.05 - 3.17
Red dyes are listed under Dyes.
Red, precipitate, N.F., powd., fib. dms., 50 lbs. or more..lb. 3.26 - —
Red saunders wood, ground, bbls. lb. .35 - —
Resorcinol, tech., 200-lb. dms., frt. alld. E. of Miss..lb. .68 - —
smaller quantities, works..lb. .74 - —
USP, cryst., 100 lbs., dms., frt. alld. E. of Miss..lb. 1.80 - —
Rhatany root, bgs.....lb. .10 - .11
Rhubarb, No. 1, high, dried, cs.lb. .75 - .80
powd., bbls.....lb. .80 - .85
No. 2, cs.....lb. .65 - .70
powd., bbls.....lb. .70 - .75
Riboflavin .....gram. 1.50 - 2.00
Rochelle salt, cryst., bbls., 5,000 lbs., 1 ship't..lb. .43½- —
smaller lots.....lb. .44 - —
powd., bbls., 5,000 lbs., 1 ship't..lb. .42½- —
smaller lots.....lb. .43 - —
Rose flowers, pale, bls.....lb. .60 - .65
red, bls.....lb. 4.90 - 5.00
Rosemary, flowers, bls.....lb. .45 - .50
leaves, bls.....lb. .17 - .18
Rosin, gum, B, bbls., ex dock....
D, bbls.....100 lbs. 3.58 - —
B, bbls.....100 lbs. 3.63 - —
E, bbls.....100 lbs. 3.67 - —
F, bbls.....100 lbs. 3.67 - —
G, bbls.....100 lbs. 3.65 - —
H, bbls.....100 lbs. 3.65 - —
I, bbls.....100 lbs. 3.65 - —
K, bbls.....100 lbs. 3.77 - —
M, bbls.....100 lbs. 3.85 - —
N, bbls.....100 lbs. 3.85 - —
W. G., bbls.....100 lbs. 4.64 - —
W. W., bbls.....100 lbs. 4.73 - —
X, bbls.....100 lbs. 4.73 - —
Rottenstone, dom., bgs., c.l., f.o.b. mines..ton.25.50 - —
l.c.l., f.o.b. mines.....ton.37.50 - —
import, lump, bbls..... No prices
powd., bbls.....lb. No prices
Rue, bls.....lb. 1.15 - 1.20

S

Sabadilla seed, powd., bbls....lb. .28 - .30
Saccharin, dms., 100 lbs.....lb. 1.45 - —
cns., 25 lbs.....lb. 1.48 - 1.50
Scullcap, Eastern, bls.....lb. .28 - .29
Western, bls.....lb. .14 - .15
Safflower, bls.....lb. .85 - .90
Saffron, Mexican, bls.....lb. .85 - .90
Spanish, tins.....lb. 45.00 -50.00
Safrol, cns.....lb. 1.60 - 1.75
dms..... No prices
Sage, Cyprus, bls.....lb. .77 - .80
Dalmatian, bls.....lb. 2.00 - 2.05
ground, bls.....lb. 2.25 - 2.30
Greek, bls.....lb. 1.60 - 1.70
Spanish, bls.....lb. .39 - .40
Sago flour, bgs.....lb. .04½- .05¼
Salicin, bots., 5 lbs.....lb. 8.03 - —
cns., 25 lbs.....lb. 7.75 - —
Salol, gran., bbls., 200-lbs....lb. .90 - —
bxs., 25 lbs.....lb. .93 - —
kgs., 100 lbs.....lb. .90 - —
powd., fib. dms., 25 lbs.....lb. 1.03 - —
kgs., 100 lbs.....lb. 1.00 - —
Salt, rock, bgs., dlvd. N.Y..ton.14.20
c.c.l., bgs., dlvd. N.Y...ton.17.00 -18.00
vacuum, common, fine, bgs., c.l., dlvd. N. Y..ton.15.70 - —
l.c.l., dlvd. N. Y.....ton.19.40 -23.20
Chrome (see Chrome cake).
Saltcake, dom., bulk, works..ton.15.00 - —
import, bulk, c.i.f.....ton.16.00 Nom
Saltpeter, dbl. refd., gran., bbls., 10-20 tons.....100 lbs. 8.20 - —
1-9 tons.....100 lbs. 8.35 - —
less than ton lots..100 lbs. 8.60 - —
powd., bbls., 10-20 tons..... 100 lbs. 9.20 - —
1-9 tons.....100 lbs. 9.35 - —
less than ton lots..100 lbs. 9.60 - —
Santonin, cryst., cns.....kilo.210.00 -220.00
Saponin, crude, cns.....lb. 2.25 - 2.50
Purified, cns., 25 lbs.....lb. 3.00 - 3.25
Sarsaparilla root, Honduras, bls., lb. .32 - .33
Mexican, bls.....lb. .19 - .20
Sassafras, bark, ord., bls.....lb. .13 - .14
select, bls.....lb. .29 - .30
Savory, bls.....lb. 1.00 - 1.10
Saw palmetto berries, bgs.....lb. .08 - .09
Scammony root, bgs.....lb. .07 - .08
resin, lump, cns.....lb. .85 - —
powd., bxs.....lb. .90 - —
Schaeffer's salt, bgs.....lb. .46 -
Seidlitz mixture, bbls., 5,000 lbs., 1 shipment..lb. .33¾- —
smaller lots.....lb. .34¼- —
kegs, 5,000 lbs., 1 shipm't..lb. .34¼- —
smaller lots.....lb. .34¾- —
Selenium, pwd. A, 10-lb. tins..lb. 2.00 - —
100-lb. cases.....lb. 1.75 - —
Senega root, spot, bls.....lb. .95 - 1.00
Senna leaves, Alexandria, half leaf, bls..lb. .18 - .20
siftings, bgs.....lb. .17 - .19
Tinnevelly, No. 1, bls.....lb. .14 - .15
2 bls.....lb. .11 - .13
3 bls.....lb. .10 - .11
powd., bbls., bxs.....lb. .13 - .14
Pods., bls.....lb. .11 - .12
Serpentaria root, bls.....lb. .65 - .75
Shellac,[2] bleached, bonedry, bbls., f.o.b. N. Y..lb. .39 - .40
dlvd., Boston.....lb. .40 - .41
Chicago.....lb. .40½- .41½
Pacific Coast.....lb. .42½- .43½
rfd., bbls., f.o.b. N. Y....lb. .45 - .46
dlvd., Boston.....lb. .45½- .46½
Chicago, ...lb. .46¾- .47¾
Pacific Coast.....lb. .48¾- .49¾
Garnet, bags.....lb. .37 - .39
D.C., V.S.O., or Diamond 1, cs., lb. .43 - .45
superfine, bgs., f.o.b. Boston, N. Y..lb. .33 - .34
dlvd., Chicago.....lb. .33½- .34½
Pacific Coast.....lb. .36 - .37
T.N., bgs., f.o.b., Boston, N.Y., lb. .32 - .33
dlvd., Chicago.....lb. .32½- .33½
Pacific Coast.....lb. .35½- .36½
Shellac, varnish, Metro area, orange, 5-lb. cut, bbls..gal. 1.70 - 1.75
4½-lb. cut, bbls.....gal. 1.65 - 1.70
4-lb. cut, bbls.....gal. 1.60 - 1.65
white, 5-lb. cut, bbls.....gal. 1.85 - 1.90
4½-lb. cut, bbls.....gal. 1.80 - 1.85
4-lb. cut, bbls.....gal. 1.75 - 1.80
Prices, dlvd., Boston or Chicago, 10c. per gal. higher.
400 mesh, bgs., c.l., works, ton.30.00 - —
l.c.l., 2½ tons, works, ton.19.00 - —
smaller lots, works.ton.20.00 - —
wet-grd., 95-97%, 325 mesh, bgs., c.l., works..ton.19.00 - —
l.c.l., 2½ tons, works, ton.21.00 —
smaller lots, works.ton.25.00 - —
Silica, amorph. wet-grd. 400 mesh, bgs., c.l., works.....ton.30.00 - —
l.c.l., 2½ tons, works, ton.35.00 - —
smaller lots, works.ton.38.00 - —
96-98% 325 mesh, bgs., c.l., works..ton.20.00 - —
l.c.l., 2½ tons, works.ton.21.50 - —
smaller lots, works.ton23.00 - —
99%, 325 mesh, bgs., c.l., works..ton.22.00 - —
med., grd., 99%, 325 mesh, l.c.l., 2½ tons, works..ton.25.50 - —



The seal of a packaging expert

PACKAGING expert? Why, the owner of that seal lived in the Middle Ages! What could he know about modern packaging?

Plenty. He knew that a package should protect its contents. That's why he sealed his letter with wax. Then the message was protected against prying fingers and eyes. A broken seal was evidence of tampering.

He knew also that his personal seal stamped in the wax identified the package—quickly told the receiver who the package was from. The seal, in a manner of speaking, was his personal trade-mark.

Why not take these packaging tips from the Middle Ages?

If you're looking for a package that will give your product complete protection, Continental can help you. Continental containers will not break, chip or crack. They're sturdy but light, easy to fill and pack, less costly to ship.

As for trade-marks, they were in use when a fellow named Gudea, who was the first to use a signet ring seal, was a babe in arms. And he died 5,000 years ago, at least. In fact, trade-marks have been in existence for as long as men have been proud of their products.

Showing you how to feature *your* trade-mark where it means the most, on your product's package, is a feature of Continental's complete packaging service—a service that takes in *every* angle of packaging.

If you have any packaging problem—whatever your product may be—call for Continental. Our sales representatives are always at your service.

CONTINENTAL CAN COMPANY

New York Chicago San Francisco Montreal Toronto Havana

Silica—Soda Nitrate

Silica, hard-quartz, 99½%, 325 mesh, bgs., c.l., works..ton.13.50 - —
l.c.l., works.....ton.18.50 - —
140 mesh, bgs., c.l., works, ton.11.00 - —
l.c.l., works.....ton.16.00 - —
Silver, bullion.....oz. .35½- —
Govt. purchase, dom., metal, oz. .7111- —
Govt. purchase, foreign metal, oz. .35 - —
Cyanide, cns., 100 ozs.....oz. .34 - —
Nitrate, 100-oz. bots.....oz. .26⅞- —
Nucleinate, bots., dms.....oz. .29 - .34
Protelnate, bots., dms..... oz. .28 - .33
Simarubra barks, bls.....lb. .45 - .50
Skunk cabbage root, bls.....lb. .11 - .12
Slate flour, bgs., c.l., works..ton. 9.00 - —
l.c.l., works.....ton.10.00 -15.00
Sloe berries. bgs.....lb. .60 - .65
Smalt, black. extra velvet, ctns., lb. .05 - .08
Blue, ctns.....lb. .07 - .08½
Snakeroot, Canada, bls.....lb. .24 - .28
Soapbark, bls.....lb. .09 - .10
crushed, bls., bbls.....lb. .13 - .13½
cut, German, bls., bbls.....lb. No stocks
dom., bbls.....lb. .15 - .16
powd., bbls.....lb. .15 - .16
Soda, acetate, anhyd., dms., dlvd., lb. .06½- .10
flake, gran., powd., 60%, dms., c.l., dlvd..lb. .04½- .05
l.c.l., dlvd.....lb. .05 - .06
USP, bbls., dlvd.....lb. .06 - .07
Alginate, dms., bbls., works, lb. .69 - .73
Aluminate, white soluble, c.l., bgs., frt. equald..100 lbs. 7.50 - —
dms., frt. equald.....100 lbs. 7.75 - —
l.c.l., bgs., frt. equald.100 lbs. 8.40 - —
dms., frt. equald.....100 lbs. 8.65 - —
Antimoniate, bbls., dlvd.....lb. .15 - .15½
Arsenate, dms., dealers., cl., works..lb. .08 - —
l.c.l., dms.....lb. .09½- .09¾
Arsenite, dry, gray, dms., c.l., dealers, works..lb. .06¾- —
l.c.l., dms., works.....lb. .07½- .08½
white, dms., c.l., dealers, works..lb. .07¾- —
l.c.l., dms., works.....lb. .08½- .09½
Soda arsenite, dry, gray, prices are ¾c. per pound higher in Chicago; 1c. per pound higher in Houston, Tex., and Colorado. White prices are 1c. per pound higher in Tex. and Colo.

Ash, dense, 58%, bgs., c.l., works..100 lbs. 1.15 - —
l.c.l., Zone 1.....100 lbs. 2.18 - —
2 .....100 lbs. 2.33 - —
3 .....100 lbs. 2.58 - —
4 .....100 lbs. 2.98 - —
bbls., c.l., works...100 lbs. 1.35 - —
l.c.l., Zone 1.....100 lbs. 2.35 - —
2 .....100 lbs. 2.50 - —
3 .....100 lbs. 2.75 - —
4 .....100 lbs. 3.15 - —
bulk, c.l., works...100 lbs. .95 - —
extra light, 58%, bgs., c.l. 100 lbs. 1.05 - 1.13
l.c.l., Zone 1.....100 lbs. 2.13 - —
2 .....100 lbs. 2.28 - —
3 .....100 lbs. 2.53 - —
4 .....100 lbs. 2.93 - —
Soda ash, extra light, bbls., c.l., works..100 lbs. 1.45 - —
l.c.l., Zone 1.....100 lbs. 2.45 - —
2 .....100 lbs. 2.60 - —
3 .....100 lbs. 2.85 - —
4 .....100 lbs. 3.25 - —
bulk, c.l.....100 lbs. .90 - —
light, 58%, bgs., c.l., works, 100 lbs. 1.05 - 1.13
l.c.l., Zone 1.....100 lbs. 2.13 - —
2 .....100 lbs. 2.28 - —
3 .....100 lbs. 2.53 - —
4 .....100 lbs. 2.93 - —
bbls., c.l., works...100 lbs. 1.35 - —
l.c.l., Zone 1.....100 lbs. 2.35 - —
2 .....100 lbs. 2.50 - —
3 .....100 lbs. 2.75 - —
4 .....100 lbs. 3.15 - —
bulk, c.l.....100 lbs. .90 - —

Soda ash l.c.l. prices are per 100 lbs. f.o.b. recognized warehouse point and include delivery in any quantity to customer's sidewalk within recognized local trucking distance of seller's warehouse. The sales zones are:—Zone 1: All Northern U.S. E. of Miss. River and North of the Southern boundaries of Ky. and Va., including also St. Louis, Mo., and Davenport, Ia., parallel La., Miss., Ala., South of 31° Texas, E. of 100° Meridian and S. of 31° parallel and Fla., in Me., N. H. and Vt.; special local zone prices apply for ship't to various counties. Zone 2: Ark. East of 93° Meridian; Neb., E. of 98° Meridian; Tex., N. of 31° parallel and E. of 100° Meridian (except Wichita Falls), Ala., La., and Miss. N. of 31° parallel; Iowa (except Davenport), Ga., Minn., Mo. (except St. Louis), N. and S. C. and Tenn. Zone 3: Kansas, Neb., W. of 98° Meridian, Tex., W. of 100° Meridian (including Wichita Falls, but excluding El Paso), N. and S. D., Okla., Ark., W. of 93° Meridian. Zone 4: El Paso, Tex.; Ariz., Colo., Idaho, Mont., Nev., N. M., Utah and Wyoming.

Soda, benzoate, tech., bbls., 4,000 lbs. or more..lb. .39 - —
1,000 to 3,900 lbs.....lb. .40 - —
900 lbs. or less.....lb. .43 - —
USP, bbls., fib., 4,000 lbs. or more..lb. .46 - —
1,000 to 3,900 lbs.....lb. .47 - —
900 lbs. or less.....lb. .50 - —
Bicarbonate, tech., bbls., c.l., works..100 lbs. 1.70 - —
l.c.l. .....100 lbs. 2.05 - —
bgs., c.l.....100 lbs. 1.55 - —
l.c.l. .....100 lbs. 1.90 - —
USP, gran., bbls., c.l., works, 100 lbs. 2.25 - —
l.c.l. .....100 lbs. 2.60 - —
powd., bbls., c.l., works.... 100 lbs. 1.85 - —
l.c.l., dlvd., N.Y..100 lbs. 2.51 - —
kgs., c.l.....100 lbs. 2.10 - —
l.c.l., dlvd., N.Y..100 lbs. 2.76 - —
Bichromate, [3], [5] spot, c.l., wks., lb. .07⅞- —
l.c.l., 6 cks., or 10 bbls. or over, works..lb. .07½- —
5 cks. or 9 bbls. or less, works..lb. .07⅝- —
Bifluoride, bbls., c.l.....lb. .11 - —
10 bbls. lots.....lb. .11½- .13
1-9 bbls.....lb. .12 - —
kegs .....lb. .12½- .14
Bisulphite, powd., bbls., c.l., works..100 lbs. 3.00 - 3.10
l.c.l., works.....100 lbs. 3.50 - 3.60
Soda, bisulphite, solution, 32 deg., bbls., c.l., works..100 lbs. 1.30 - —
l.c.l., bbls., works..100 lbs. 1.55 - —
33 deg., bbls., c.l., works, 100 lbs. 1.35 - —
l.c.l., bbls., works..100 lbs. 1.60 - —
35 deg., c.l., works..100 lbs. 1.40 - —
l.c.l., bbls., works..100 lbs. 1.65 - —
44 deg., bbls., works.100 lbs. 1.55 - —
l.c.l., bbls., works..100 lbs. 1.80 - —
Bromide, USP, gran., bbls., 500 lbs..lb. .27 - .31
fiber dms., 100 lbs.....lb. .28 - .32
Cacodylate, 1-kilo bots.....lb. No prices
Carbonate (see Soda ash, soda monohydrated, soda sal).
Caustic, flake, 76% powd., ammon, process, bbls., c.l., works..100 lbs. 2.95 - —
dms., c.l., works..100 lbs. 2.70 - —
l.c.l., Zone 1....100 lbs. 3.55 - 4.90
2 .....100 lbs. 3.70 - 5.05
3 .....100 lbs. 3.95 - 5.30
4 .....100 lbs. 4.35 - 5.70
electro process, dms., c.l., works..100 lbs. 2.70 - —
L.c.l., same zone prices as ammonia process
liquid, 47-49%, buyers' tanks, works..100 lbs. 1.92½- —
sellers' tanks, works..... 100 lbs. 1.95 - —
70%, buyers' tanks, works, 100 lbs. 1.97½- —
sellers' tanks, works..... 100 lbs. 2.00 - —
solid, 76% ammon., process, dms., c.l., works..100 lbs. 2.30 - —
l.c.l., Zone 1....100 lbs. 3.15 - —
2 .....100 lbs. 3.30 - —
3 .....100 lbs. 3.55 - —
electro process, dms., c.l., works..100 lbs. 2.30 - —

Soda, caustic, solid, electro process, dms., l.c.l., same zone prices as ammon. process. Caustic soda, l.c.l., prices are on the same basis as those for soda ash. The sales zones are also the same.

Chlorate, dom., cryst., bgs., c.l., works..lb. .06¼- —
l.c.l., works.....lb. .06½- —
powd., bgs., c.l., works..lb. .06½- —
l.c.l., works.....lb. .07 - .08½
Chromate, [3] [5], spot, c.l., works, lb. .08¾- —
l.c.l., 6 cks., 10 bbls. or over, works..lb. .09½- —
Citrate, USP VIII, 225-lb. bbls, lb. .18½- —
cns., dms., 50-lb. lots....lb. .20½- —
25-lb. lots.....lb. .22½- .23½
dms., kgs., 100-lb. lots...lb. .19½- —
USP XI, gran., bbls., 250-lb. lots..lb. .24 - —
boxes, 50-lb. lots.....lb. .26 - —
cns., 25-lb. lots.....lb. .28 - .29
kgs., 100-lb. lots.....lb. .25 - —
powd., bbls., 250-lb.lots..lb. .24½- —
boxes, 50-lb. lots.....lb. .26½- —
cns., 25-lb. lots.....lb. .29½- —
kgs., 100-lb. lots.....lb. .25½- —
Cyanide, 96-98%, dom., dms..lb. .14 - .15
imports, 90%, cs.....lb. No prices
Diacetate, 38-35% acidity, bbls., dlvd..lb. .10 - —
anhy., dms., dlvd.....lb. .12½- —
Fluoride, white, 30%, bbls., c.l., frt. alid..lb. .08 - —
l.c.l., 10 or over, same basis..lb. .08½- —
1-9, same basis.....lb. .09 - —
Soda, fluoride, white, 95%, bbls., c.l., same basis..lb. .08¼- —
l.c.l., 10 or over, same basis..lb. .08¾- —
1-9, same basis.....lb. .09¼- —
Soda fluoride prices at Los Angeles are f.a.e. works.
Glycerophosphate, NF, cryst., bbls., 1,000-lb. lots....lb. 1.25 - —
100-lb. lots.....lb. 1.40 - —
cns., 25 lbs.....lb. 1.65 - —
powd., bbls., 1,000-lb. lots.lb. 1.80 - —
100-lb. lots.....lb. 1.40 - —
cns., 25 lbs.....lb. 1.70 - —
solution, cbys., cns.....lb. .82 - 1.02
Hydrosulphite, [6] dms., frt. alid, lb. .17 - .18
Hydroxide, USP, sticks, cns., 100 to 1,000-lb. lots..lb. .22 .24
Hypophosphite, N. F., cns., 100-lb. lots..lb. .67 - —
Hyposulphite, cryst., large, bgs., works, frt. equal'd..100 lbs. 2.25 - —
bbls., same basis..100 lbs. 2.45 - —
l.c.l., bgs., works, frt. equal'd..100 lbs. 2.50 - —
bbls., same basis..100 lbs. 2.70 - —
pea, bgs., c.l., works.100 lbs. 2.60 - —
bbls., works.....100 lbs. 2.80 - —
dms., works.....100 lbs. 3.10 - —
5,000 lbs. and over, bgs., works..100 lbs. 2.75 - 3.00
bbls., works.....100 lbs. 2.95 - 3.20
dms., works.....100 lbs. 3.25 - 3.60
pea, 2,500 to 5,000 lbs., bgs., works..100 lbs. 2.85 - 3.10
bbls., works.....100 lbs. 3.05 - 3.30
dms., works.....100 lbs. 3.35 - 3.60
500 to 2,500 dms., works, 100 lbs. 3.10 - 3.25
bbls., works.....100 lbs. 3.30 - 3.55
dms., works.....100 lbs. 3.60 - 3.85
pea, less than 500 lbs., bgs., works..100 lbs. 2.70 - 3.95
bbls., works.....100 lbs. 3.90 - 4.15
dms., works.....100 lbs. 4.20 - 4.45
Iodate, jars.....lb. 5.49 - —
Iodide, jars.....lb. 2.42 - —
bots. .....lb. 2.52 - 2.57
Mandelate, 100-lb. dms.....lb. 3.25 - —
Metanilate, bgs.....lb. .40 - —
Metasilicate, anhyd., dms., c.l., works, frt. equald.... 100 lbs. 4.00 - —
15 dms. and over, dlvd. N.Y..100 lbs. 4.90 - —
3-14 dms., same basis... 100 lbs. 5.05 - —
1-2 dms., same basis... 100 lbs. 5.30 - —
gran., bbls., c.l., works....lb. 2.50 - —
10 bbls. and over, dlvd. N.Y..lb. 3.30 - —
1-9 bbls., dlvd. N.Y.....lb. 3.55 - —
Molybdate, anhyd., kgs., works, lb. .47 - —
Monohydrated, bbls.....100 lbs. 2.60 - —
works .....100 lbs. 2.30 - —
Naphthionate, bbls.....lb. .50 - —
Nitrate, crude, dom., c.l., 100-lb. bgs., dlvd., f.o.b. cars, producing points or ports, rail or boat shipment .....ton.30.05 - —
200-lb. bgs., same basis, ton.29.35 - —
bulk, same basis.....ton.27.00 - —

SPOT DELIVERIES

Sodium Hydrosulphite

CAUSTIC POTASH ★ NICKEL SULPHATE ★ SILVER NITRATE
WHITE HEAVY CALCINED MAGNESIA ★ BICHROMATES
WHITE CALCINED MAGNESITE ★ ★ ZINC SULPHATE

OTHER SPECIAL PRODUCTS

Distributors for THE RUFERT CHEMICAL COMPANY

NICKEL FORMATE • Also NICKEL CATALYST • NICKEL CARBONATE • NICKEL OXIDE, ETC.

GOLWYNNE CHEMICALS CORPORATION

420 LEXINGTON AVENUE • NEW YORK • PHONE LE 2-9740

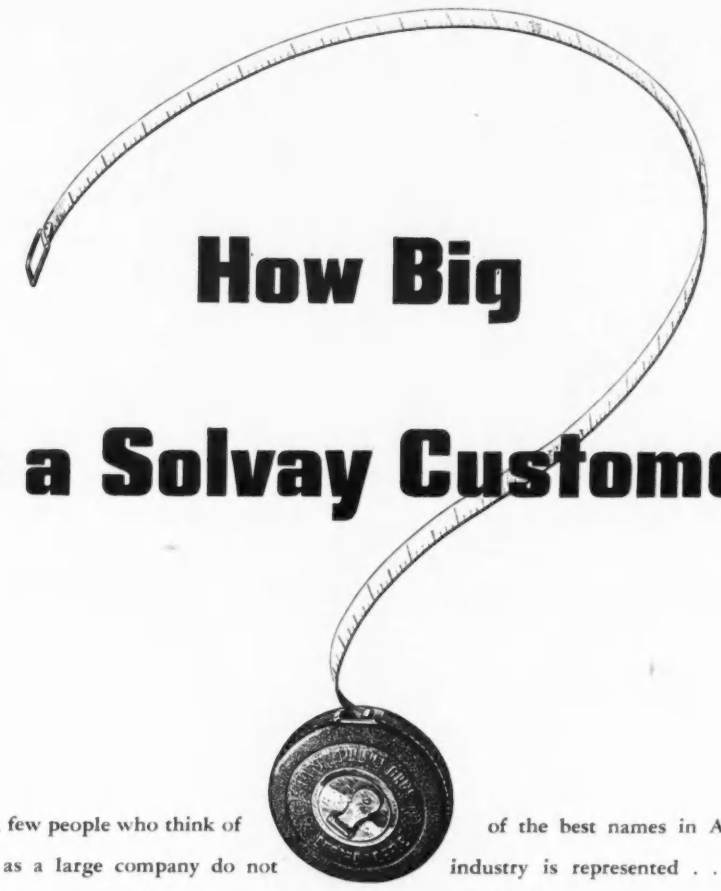
Soda, nitrate, imp., c.l., 100-lb. bgs., f.o.b. cars, Atl., Gulf, Pac. warehouses, rail or boat shipment, ton. 33.00 - —
200-lb. bgs., same basis, ton. 32.40 - —
bulk, same basis....ton. 30.00 - —
refd., gran., bbls., 10 tons, 100 lbs. 3.60 - —
1-9 tons.....100 lbs. 3.75 - —
smaller lots.....100 lbs. 4.00 - —
Nitrite, 96-98%, dom., bbls., c.l., works, frt. equalized..lb. .06¾- —
96-98%, dom., bbls., c.l., West Coast, f.o.b. ports....lb. .08 - —
l.c.l. .....lb. .08¾- .11¼
Soda nitrite l.c.l. prices range represents delivery at various points.
Orthosilicate, anhyd., dms., c.l., works, frt. equald..lb. 4.50 - —
15 dms. and over, same basis..lb. 5.45 - —
3-14 dms., same basis..lb. 5.60 - —
1- 2 dms., same basis..lb. 5.85 - —
flake, dms., c.l., works.100 lbs. 3.15 - —
10 bbls. and over, dlvd. N.Y.C..100 lbs. 4.30 - —
1-9 bbls., same basis..100 lbs. 4.55 - —
Oxalate, neut., bbls.....lb. .09¼- —
Perborate, NF, bbls., c.l., works, lb. .14¾- —
l.c.l., works.....lb. .15¼- —
Pentachlorphenate briquets, single bgs., works..lb. .26 - —
70 lbs., bgs., works.....lb. .19¼- —
490 lbs., bgs., works.....lb. .17½- —
powd., 100 lbs., bgs., works, lb. .19 - —
500 lbs., bgs., works.....lb. .17 - —
Phosphate, dibasic, anhyd., bgs., c.l., works..100 lbs. 6.00 - 6.25
l.c.l., works.....100 lbs. 6.15 - 7.25
bbls., c.l., works...100 lbs. 6.20 - 6.45
l.c.l., works.....100 lbs. 6.70 - 7.45
cryst., tech., bgs., c.l., works, 100 lbs. 2.55 - 2.70
l.c.l., works.....100 lbs. 2.95 - 3.45
bbls., c.l., works...100 lbs. 2.75 - 2.90
l.c.l., works.....100 lbs. 3.15 - 3.65
monobasic, anhyd., bgs., c.l., works..100 lbs. 7.25 - 6.25
l.c.l., works.....100 lbs. 8.00 - 9.00
bbls., c.l., works.....100 lbs. 7.45 - 8.45
l.c.l., works.....100 lbs. 8.20 - 9.20
tribasic, bgs., c.l., works...lb. 2.70 - 2.85
l.c.l., works.....100 lbs. 3.10 - 3.60
bbls., c.l., works...100 lbs. 2.90 - 3.05
l.c.l., works.....100 lbs. 3.30 - 3.80
kegs, c.l., works...100 lbs. 3.40 - 3.55
l.c.l., works.....100 lbs. 3.75 - 4.30
USP (dibasic), bbls., dms., works..lb. .08 - .10
dried, bbls., dms., works..lb. .11½- .16
Picramate, kgs.....lb. .65 - —
Prussiate, yellow, bbls., 10,000 lbs. or more..lb. .11 - —
contracts .....lb. .10 - —
smaller lots.....lb. .11¼- —
contracts .....lb. .10¼- —
Pyrophosphate, anhyd, bgs., c.l., works, frt., equale'd... 100 lbs. 5.25 - 6.10
5 tons and over same basis.. 100 lbs. 5.40 - 6.25
less than 5 tons same basis, 100 lbs. 5.75 - 6.60
bbls., c.l., works, frt. equalized..100 lbs. 5.45 - 6.30
5 tons and over same basis, 100 lbs. 5.60 - 6.45
less than 5 tons same basis, 100 lbs. 5.95 - 6.80
Ricinoleate, tech., bbls.....lb. .12 - —
Sal. bgs., dlvd., N. Y..100 lbs. 1.20 - —
works .....100 lbs. 1.00 - —
bbls., dlvd., N. Y.....100 lbs. 1.30 - —
works .....lb. 1.10 - 1.30
Salicylate, bxs.....lb. .52 - .55
Sesquicarbonate, bgs., c.l., works..100 lbs. 1.50 - —
bbls., c.l., works...100 lbs. 1.70 - —
bbls., l.c.l., Zone 1....100 lbs. 2.70 - —
2 .....100 lbs. 2.85 - —
3 .....100 lbs. 3.10 - —
4 .....100 lbs. 3.50 - —
Soda sesquicarbonate l.c.l. prices are on same basis as those for soda ash and caustic soda. The sales are also the same.
Sesquisilicate, dms., c.l., works, 100 lbs. 3.05 - —
10 bbls. or over, dlvd. N.Y.C., 100 lbs. 4.05 - —
1-9 bbls.....100 lbs. 4.30 - —
Silicate, 40° turbid, dms., c.l., works..100 lbs. .80 - —
l.c.l., 5 or more, works, 100 lbs. 1.05 - —
1 to 4, works....100 lbs. 1.20 - —
52°, dms., c.l., works.100 lbs. 1.40 - —
l.c.l., 5 or more, works, 100 lbs. 1.65 - —
1 to 4, works....100 lbs. 1.80 - —
Silicofluoride, dom., bbls.....lb. .12 - .15
Stannate, dms.....lb. .33½- .36½
Stearate, lump, powd., bbls., works..lb. .19 - .24
Sulphate, anhyd., bgs., bbls., c.l., works..100 lbs. 1.70 - 1.90
5 tons or over, works, 100 lbs. 1.95 - 2.15
less than 5 tons, works, 100 lbs. 2.20 - 2.40
cryst. (see Glauber's salt).
Sulphate, N.V. VI, exsiccated, powd., bbls..lb. .07 - .07¼
U.S.P. cryst., gran., bbls..lb. .10 - .10½
Sulphide, cryst., bbls., c.l., works..100 lbs. 2.40 - —
l.c.l., 5 tons or over, dlvd. 100 lbs. 2.90 - —
less than 5 tons, dlvd. 100 lbs. 3.15 - —
solid, bbls., c.l., works..... 100 lbs. 3.15 - —
l.c.l., 5 tons or over, dlvd., 100 lbs. 3.65 - —
less than 5 tons, dlvd. 100 lbs. 3.90 - —
Sulphite, cryst., bgs., 100 lbs., works..lb. 2.10 - 2.35
bbls. .....100 lbs. 2.30 - 2.55
powd., bbls., c.l.....100 lbs. 5.25 - —
l.c.l., 5 or more...100 lbs. 5.50 - —
1 to 4.....100 lbs. 6.00 - —
Sulphocarbolate, gran., bbls., dms..lb. .26 - .28
Sulphocyanide, C.P., dms....lb. .55 - .65
Sulphohydrate, liquid, 38%, basis 100%, dms., c.l., f.o.b. works..lb. .05½- —
l.c.l., works.....lb. .06 - —
single dm. lots, works...lb. .08 - —
tanks, works.....lb. .04½- —
flake, 70-72%, dms., c.l., works..lb. .04½- —
l.c.l., works.....lb. .05 - —
Sulphoricinolate, bbls.....lb. .12 - —
Thiosulphate (see Hyposulphite).
Tungstate, CP, kgs.....lb. No prices
tech., kgs.....lb. 1.35 - 1.50

Solvent, naphtha,[2] dms., wks.gal. .31 - —
tanks, E. of Omaha, frt. alld., gal. .27 - —
W. Coast, f.o.b. Minnequa, Colo..gal. .27 - —
high-flash, dms., works...gal. .32 - —
tanks, E. of Omaha, frt. alld..gal. .27 - —
Sorbitol, com'l, dms., works...lb. .17¾- —
Soybean meal, 41%, bgs.....ton. 47.70 - —
protein, bgs., c.l., works.....lb. .20 - —
l.c.l., 10-20 tons, works....lb. .20¼- —
100-20,000 lbs., works.....lb. .20½- —
smaller lots, works.....lb. .24 - —
Sparteine sulphate, cns.....oz. 3.65 - 4.00
Spearmint leaves, bls.....lb. .30 - .31
Spikenard root, bls.....lb. .16 - .17
Spruce extract, reg., bbls., c.l., works..lb. .02½- —
tanks, works.....lb. .01½- —
powd., super, bgs., c.l., works, lb. .04½- —
Squawvine, leaves, bls.....lb. .14 - .15
Squill, red, powd.....lb. .58 - .60
White, bls.....lb. .18½- .19
powd., bbls., bxs.....lb. .24 - .25
St. Ignatius beans, bgs.....lb. .45 - .46
St. John's Bread, edible, bls., lb. .15 - .20
inedible, bls.....lb. .09 - .10
Starch, corn, pearl, bgs., f.o.b. Chicago..100 lbs. 3.10 - —
dlvd., N. Y.....100 lbs. 3.45 - —
powd., bgs., f.o.b. Chicago, 100 lbs. 3.20 - —
dlvd., N. Y.....100 lbs. 3.55 - —

Starch, potato, dom., bgs., c.l..lb. .0610- —
l.c.l. .....lb. .0735- —
Import, bgs.....lb. No prices
rice, bgs.....lb. .09 - .10
Sweetpotato, bgs.....lb. .06¼ Nom.
bbls. .....lb. .07 Nom.
Wheat, thick, boil, bgs.....lb. .05 - —
Starch, iodide, bots.....lb. 1.87 - —
Staveacre, seed, bgs.....lb. .35 - .40
Stearin, oleo.....lb. .10½- .11
Stillingia root, bls.....lb. .09 - .10
Stoneroot, bls.....lb. .07½- .08
Storax, cs.....lb. 2.00 Nom.
Stramonium leaves, bls.....lb. .27 - .30
Strontium bromide, cns.....lb. .53 - .55
Carbonate, NF, IV, 250-lb. bbls..lb. No prices
tech., 90%, precip., bbls....lb. .15 - .18
Chloride, tech., bbls.....lb. .22 - .25
Iodide, bots., 5 lbs.....lb. 3.06 - —
jars, 25 lbs.....lb. 3.00 - —
Nitrate, dom., bbls., c.l., wks., lb. .07¾- —
25 bbls. and over.....lb. .08¼- —
1-24 bbls. and over.....lb. .08¾- —
Oxalate, bbls.....lb. .44 - —
Strophanthus seed, Kombe, bgs.lb. 3.75 - 4.00
Strolyl, acetate, bots.....lb. 3.10 - 3.25
Strychnine, cryst., cns., 100-oz. lots..oz. .70 - —
Acetate, 25-oz. cns., 100-oz. lots..oz. .79 - —
Arsenate, 25-oz. cns., 100-oz. lots..oz. .82 - —
Arsenite, 25-oz cns., 100-oz. lots..oz. .79 - —

Soda Nitrate—Sulfapyridine

Strychnine, glycerophosphate, 25-oz. cns., 100-oz. lots..oz. .80 - —
Hydrochloride, 25-oz. cns., 100-oz. lots..oz .79 - —
Hypophosphite, 25-oz. cns., 100-oz lots..oz. .91 - —
Nitrate, 25-oz. cns., 100-oz. iots..oz. .73 - —
Phosphate, 25-oz. cns., 100-oz. lots..oz. .80 - —
Sulphate, cryst., cns., 100-oz. lots..oz. .58 - —
powd., cns., 100-oz. lots.oz. .48 - —
Sucrose Octa-acetate, C.P. grade., bbls., l.c.l., works..lb. .55 - —
denat., bbls., l.c.l., works..lb. .45 - —
tech., bbls., l.c.l., works.....lb. .40 - —
Sugar coloring, bbls.....gal. .75 - 1.45
Milk, bbls., c.l.....lb. .25 - —
l.c.l., 10 or over.....lb. .26 - —
less than 10.....lb. .27 - —
Sulfadiazine, tablets, bots., 50's. ea. 4.86 - —
100's .....ea. 8.46 - —
1,000's .....ea. 72.00 - —
Sulfaguanidine, 3.5-gm. bot..doz, 3.50 - —
4-oz bots.....ea. 8.10 - —
1-lb. bots.....ea. 30.00 - —
Sulfanilamide, 5 lbs., bots....lb. 1.70 - —
f.b. dms., 1,000 lbs., 1 delivery, lb. 1.25 - —
100 lbs.....lb. 1.30 - —
25-lb. lots.....lb. 1.45 - —
Sulfapyridine, powd., for hospitals, 5-gram bots..ea. .50 - —



How Big Is a Solvay Customer

Quite a few people who think of Solvay as a large company do not realize how many Solvay customers are people operating small and medium size businesses . . . or how many of these Solvay customers run plants of one kind or another in practically *every* industry you can name.

"Size of the order" is no measure of a Solvay customer. In fact, a list of Solvay customers would show that a cross section of the best names in American industry is represented . . . *large and small alkali buyers alike!*

With Solvay, the delivery of its quality alkalies is usually an introduction to long standing customer relationships . . . founded on helping customers get the most out of Solvay products . . . also helping them make *better* products, improve their processes or lower manufacturing costs.

SOLVAY SALES CORPORATION
Alkalies and Chemical Products Manufactured by The Solvay Process Company
40 RECTOR STREET NEW YORK, N. Y.

BRANCH SALES OFFICES:
Boston • Charlotte • Chicago • Cincinnati • Cleveland • Detroit
New Orleans • New York • Philadelphia • Pittsburgh • St. Louis • Syracuse
Plants Located At: Syracuse, N. Y. • Detroit, Mich. • Baton Rouge, La. • Hopewell, Va.

Soda Ash · Caustic Soda · Caustic Potash · Modified Sodas · Para-dichlorobenzene · Potassium Carbonate · Chlorine
Ammonium Bicarbonate · Ammonium Chloride · Calcium Chloride · Causticized Ash · Salt · Sodium Nitrite

Sulfathiazole—Turmeric

Sulfathiazole, 5-gm., bot.....ea. .42 - —
Sesquicarbonate, 5-gm. bot..ea. .42 - —
Sulphonethylmethane, kgs.....lb. 6.75 - 6.80
Sulphonmethane, kgs.....lb. 5.25 - —
Sulphur, crude, bulk, f.o.b. cars, mines, contracts..long ton.16.00 - —
f.o.b. steamers, Gulf ports, contract..long ton.17.50 - —
flowers, USP, bgs., c.l..100 lbs. 3.05 - —
l.c.l. .....100 lbs. 3.55 - —
bbls., c.l. .....100 lbs. 3.40 - —
l.c.l. .....100 lbs. 3.90 - —
flour, comm'l bgs., c.l..100 lbs. 1.65 - —
l.c.l. .....100 lbs. 2.15 - —
refined, cast, bgs., c.l....100 lbs. 2.20 - —
l.c.l. .....100 lbs. 2.70 - —
heavy, USP, bgs., c.l..100 lbs. 2.60 - —
l.c.l .....100 lbs. 3.10 - —
bbls., c.l. .....100 lbs. 2.95 - —
l.c.l. .....100 lbs. 3.45 - —
light, USP, bgs., c.l..100 lbs. 2.70 - —
l.c.l. .....100 lbs. 3.20 - —
bbls., c.l. .....100 lbs. 3.05 - —
l.c.l. .....100 lbs. 3.55 - —
lump, bgs., c.l. .....100 lbs. 2.20 - —
l.c.l. .....100 lbs. 2.70 - —
bbls., c.l. .....100 lbs. 2.55 - —
l.c.l. .....100 lbs. 3.05 - —
roll, bgs., c.l. .....100 lbs. 2.40 - —
l.c.l. .....100 lbs. 2.90 - —

Prices at the mine for various grades refined sulphur 25c. less per 100 pounds.

Rubbermakers, comm'l, 99½%, bgs., c.l., frt. alld..100 lbs. 2.05 - —
refined, 100%, bgs., c.l., frt. alld..100 lbs. 2.40 - —
Chloride, 55-gal. dms., c.l....lb. .03 - .03¼
l.c.l., dms., works....lb. .04 - .04¼
10-gal. dms., c.l. .....lb. .07 - .07¼
l.c.l. .....lb. .08 - .08¼
Dioxide, liquid, com'l., cyls., works..lb. .07 - .09
multi-unit, cars, works..lb. .04½- .07
tanks, works.....lb. .04 - .06
refrigeration, cyls., works..lb. .13 - .40
multi-unit cars, works..lb. .07¼- .10
Iodide, bots., jars.....lb. 3.90 - 4.05
Precipitated, USP, bbls.....lb. .17 - .22
Sumac, grd., Sicilian, f.a.s...ton. No prices
leaf, f.a.s.....ton. No prices
extract, bbls., No. 1.....lb. .08 - —
No. 2.....lb. .07 - —
stainless, bbls.....lb. .09 - .11
Berries, bgs.....lb. .10 - .12
Sunflower seed, Calif., large, bgs., lb. .06¾- .07¼
medium, bgs.....lb. .06¼- .07
poultry .....lb. .05¼- .06¾
Superphosphate, run-of-pile, bulk, f.o.b. cars, boat, Balto..ton. 9.50 - —
guaranteed 16%, bulk, same basis..ton.10.00 - —
20%, bulk, same basis....ton.12.00 - —
triple, bulk, f.o.b. cars, Balto., spot..unit-ton. .80 - —

T

Talc, dom., Calif., 1, c.l.....ton.20.00 - —
2, c.l.....ton.17.00 - —
N.Y., fibrous, 95-94%, 325 mesh, c.l..ton.14.00 -16.00
l.c.l. .....ton.16.00 -18.00
99-99½%, 325 mesh, c.l.... ton.15.25 -17.25
l.c.l. .....ton.17.25 -19.25
Talc, dom., N.Y., fibrous, 96-98%, 325 mesh, c.l..ton.15.00 -17.00
l.c.l. .....ton.17.00 -19.00
99.95%, 325 mesh, c.l..ton.17.00 -19.00
coarse, off-color, c.l.....ton.11.00 -13.00
Aluminum, flake-type, grd. c.l..ton.14.50 -24.50
l.c.l. .....ton.16.50 -30.00
Pennsylvania, c.l.....ton.11.00 -13.50
l.c.l. .....ton.12.00 -14.50
Vermont, c.l.....ton.14.00 - —
l.c.l. .....ton.15.00 - —
Imp., Canadian, c.l., dlvd. N. Y..ton.24.00 -30.00
French .....ton. No prices
Italian .....ton. No prices
Talc, domestic, is quoted at the mills in bag packing.
Tallow,[5] extra, loose.....lb. .09 - .09¼
special loose.....lb. .08⅞- .09⅛
sulphonated, 85% (34% fat), dms., c.l..lb. .05 - —
l.c.l. .....lb. .06 - —
50% (43% fat), dms., c.l..lb. .06¼- —
l.c.l. .....lb. .07⅛- —
50% (43% fat), dms., c.l..lb. .07 - —
l.c.l. .....lb. .08 - —
Tamarind, No. 1, bbls.....lb. .06 - .07
kegs .....lb. 6.00 - 8.00
Tankage, fertilizer, animal, dom., grd., 9% ammon., 10% b.p.l., bulk, basis N. Y..unit-ton. 4.25 & .10
10-11% ammon., 15% b.p.l., bulk, basis Chi..unit-ton. 3.75 & .10
feeding, unground, 9-11% ammon., 15-20% b.p.l., bulk, basis N. Y.....unit-ton. 5.00 & .10
high-grade, bulk, Chicago, unit-ton. 5.40 & .10
import, S. Amer., 10-12% ammon., 15% b.p.l., bulk, c.i.f. ports..unit-ton. 4.95 & .10
Tansy leaves, bls.....lb. .22 - .23
Tapioca flour, bgs.....lb. .04¼- .07
Tar acid oil,[7] 15%, dms., c.l., works..gal. .27½- —
l.c.l., same basis.....gal. .29½- —
25%, dms., c.l., works.....gal. .31½- —
l.c.l., same basis.....gal. .33½- —
Tar, pine, retort, dms., dlvd. E. cities..gal. .32½- —
ports .....gal. .32 - —
tanks, dlvd. E. cities....gal. .24 - —
Tarragon herb, bgs.....lb. 1.50 - 1.95
Tartar emetic, tech., fine gran. or powd., bbls., kgs., 5 or more...lb. .47¾- —
less than 5.....lb. .48 - —
dms. .....lb. .48½- .51
USP, powd., bbls.....lb. .52¾- .53
Terpinyl acetate, cns.....lb. .74 - —
dms. .....lb. .71 - —
Terpin hydrate, bbls., dms.....lb. .60 - .65
Terpineol, CP, cns.....lb. .36 - —
dms. .....lb. .33 - —
alpha, denat. grade, dms., c.l., wks., net wgt..lb. .17 - —
Terra alba (see Gypsum).
Tetrachloroethane, dms., wks..lb. .08 - .08½
Tetrachloroethylene, CP, dms..lb. .21½- —
tech. (see Perchloroethylene).
Tetralin, dms.....lb. .19 - —
Tetrasodium pyrophosphate (see soda pyrosphosphate).
Thallium sulphate, 99% pure, bots., works..lb. 5.00 - 7.00
Theobromine .....lb. 2.40 - 2.65
Sodiosalicylate, dms.....lb. No prices
Thiamine hydrochloride, bots., cns., gram. .65 - .90
Thiocarbanilide, dms.....lb. .24 - —
Thio Urea, C.P., dms.....lb. .55 - .65
Thorium, nitrate, cs, works...lb. 2.00 - —
Thyme, French, bls.....lb. .89 - .94
Morocco, bls.....lb. .21 - .21½
Spanish, bls.....lb. .22 - .23
Thymol, cns., 25 lbs.....lb. 3.00 Nom.
Iodide, kgs., 50 lbs.....lb. 3.40 - —
25 lbs.....lb. 3.50 - —
Timbo root (see cube root).
Tin chloride (ous), anhyd.....lb. .48 - .48½
Crystals, bbls., bgs.....lb. .39 - .39½
Metal,[1,7] Straits.....lb. .52 - —
Oxide, bbls.....lb. .55 - —
Tetrachloride, anhyd., bbls..lb. No price
Titanium, dioxide, bgs., c.l., (20 tons)..lb. .14½- —
l.c.l., 5 tons, single delivery, lb. .14¾- —
1,000-9,999 lbs.....lb. .15 - —
50-999 lbs.....lb. .15½- —
bbls., c.l. (20 tons).....lb. .14¾- —
l.c.l., 5 tons, single delivery, lb. .15 - —
1,000-9,999 lbs.....lb. .15¼- —
50-999 lbs.....lb. .15½- —
non-chalking, bgs., c.l. (20 tons)—lb. .16½- —
l.c.l., 5 tons, single delivery, lb. .16¾- —
1,000-9,999 lbs.....lb. .17 - —
50-999 lbs.....lb. .17½- —
bbls., c.l. (20 tons).....lb. .16¾- —
l.c.l., 5 tons, single delivery..lb. .17 - —
1,000-9,999 lbs.....lb. .17½- —
50-999 lbs.....lb. .17½- —
chalk-resistant, bgs., c.l. (20 tons)..lb. .15 - —
l.c.l., 5 tons, single delivery, lb. .15¼- —
1,000-9,999 lbs.....lb. .15½- —
50-999 lbs.....lb. .15¾- —
bbls., c.l. (20 tons).....lb. .15 - —
l.c.l., 5 tons, single delivery, lb. .15½- —
1,000-9,999 lbs.....lb. .15¾- —
50-999 lbs.....lb. .16 - —
barium or magnesium base, bgs., c.l. (20 tons)..lb. .05¾- —
l.c.l. .....lb. .06 - —
bbls., c.l. (20 tons).....lb. .06 - —
l.c.l. .....lb. .06¼- —
calcium base, bgs., c.l. (20 tons), lb. .06½- —
calcium-rutile base, bgs., c.l. (20 tons)..lb. .05¼- —
l.c.l. .....lb. .05¾- —
bbls., c.l. (20 tons).....lb. .05¾- —
l.c.l. .....lb. .06 - —

Carload prices are f.o.b. factories with actual freight paid. Less than carload prices are f.o.b. factories or ex warehouse with actual freight or trucking paid, except on the Pacific Coast, where they are f.o.b. warehouses. Pacific Coast prices are ¼c. per lb. higher than the above.

Toluidin base, distilled, kgs....lb. .96 - —
Tolu, balsam, cns.....lb. .95 - 1.00
Toluidin, mixed, dms.....lb. .26 - —
Toluol[2,3] (toulene), 2° indus., dms., returnable..gal. .33 - —
tanks, E. of Omaha, frt. alld. gal. .28 - —
W. Coast, f.o.b. Minnequa, Colo..gal. .28 - —
1° nitration,[6] dms., returnable, gal. .34½- —
tanks, E. of Omaha, frt. alld.. gal. .29½- —
W. Coast, f.o.b. Minnequa, Colo..gal. .29½- —
Tonga vine, F, bls.....lb. .65 - .70
root, bls.....lb. .65 - .70
Tonka beans, Angostura, cks..lb. 2.40 - 2.50
Brazilian, Surinam, cs.....lb. .70 - .85
Triacetin, dms.....lb. .26 - .—
Trimyl borate, dms., l.c.l., works. lb. .33 - —
Triamylamine, l.c.l., works....lb. .90 - —
Tributylamine, l.c.l., dms., works. lb. .70 - —
Tributyl citrate, ton lots, 475-lb. dms..lb. .24 - —
smaller lots.....lb. .32 - —
Phosphate, dms., l.c.l., dlvd..lb. .47 - —
cns., works.....lb. .51 - —
Trichlorobenzene, dms., c.l., frt. alld..lb. .08 - —
l.c.l., same basis.....lb. .08½- —
tanks .....lb. .07½- —
Trichlorethylene,[8] dms., c.l., wks., frt. alld., Zone 1..lb. .08 - —
l.c.l., same basis.....lb. .08½- —
Zone 2, dms., c.l., works, frt. alld..lb. .08½- —
l.c.l., same basis.....lb. .09 - —
Zone 3, c.l., works, frt. alld..lb. .09 - —
l.c.l., same basis.....lb. .09½- —
Zone 4, dms., c.l., f.o.b. stock points..lb. .09 - —
l.c.l., same basis.....lb. .09½- —

All prices on trichlorethylene are frt. alld. with the exception of Zone 4, in which case the prices indicated are based on f.o.b. L. A., Cal.; S. F., Cal.; Portland, Ore., and Seattle, Wash. Zone 1 includes the following States:—Conn., Md., N. Y., Va., Ky., Me., N. J., Vt., W. Va., Mo., Tenn., Ind., Ia., Pa., R. I., Ill., Mich., Minn., Wis., Del., Mass., N. C., O., Omaha, Neb.; Kansas City, Kansas. Zone 2 includes Ala., Kan., except Kansas City, N. D., Ga., Neb., except Omaha; S. D., Miss., Ark., S. C., La., Okla. and Fla. Zone 3 includes Colo., N. M., Wyo, Texas and Eastern Montana. Zone 4 includes Arizona, Western Montana, Idaho, Ore., Nev., Wash., Utah and Cal.

Tricresyl, phosphate,[8] CP, cns., dlvd..lb. .40½- .51½
dms., c.l., dlvd.....lb. .37½- —
Tech., dms., c.l.....lb. .25 - —
500 lbs., dms.....lb. .35½- —
Triethanolamine, dms., c.l., works. lb. .19 - —
l.c.l., works.....lb. .20 - —
tanks, works.....lb. .18 - —
Triethylamine, dms., l.c.l., works. lb. 1.05 - —
Triethyl citrate, ton lots, 500-lb. dms..lb. .24 - —
smaller lots.....lb. .32 - —
Triethyl phosphate, dms., dlvd..lb. .45 - —
Triethyleneglycol, dms., l.c.l., works..lb. .26 - —
Trimethyl phosphate, cns.....lb. .54 - .56
dms., dlvd.....lb. .50 - —
Trimethylamine, dms., c.l., dlvd. lb. .35 - —
l.c.l., dlvd.....lb. .90 - —
Triphenyl phosphate[8], dms....lb. .38 - —
Tripoli, air-floated, bgs., c.l., works..ton.21.00 - —
double grd., bgs., c.l., works. ton.17.50 - —
once-grd., bgs., c.l., works.ton.16.00 - —
Trisodium phosphate (see Soda phosphate, tribasic).
Tuba root (see Derris root).
Tungsten metal powd.,[8,9] 99% dms., works..lb. 2.60 - —
Oxide, CP, kgs.....lb. No prices
Chem. grade, kgs.....lb. No prices
Turmeric root, Alleppey, bgs..lb. .09¼- .10
Madras, bgs.....lb. .09½- .10¼

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VELSICOL

HYDROCARBON RESINS

PROVED, different, and in many ways superior resinous materials, still available at moderate price. Suggested for *coatings, impregnants, bonding compounds and plastic masses.* Samples, full information on request.

COLORS— Yellow to deep brown

CONSISTENCIES — From liquid to high-melting solid

MOLECULAR WEIGHTS— 400 to 1200

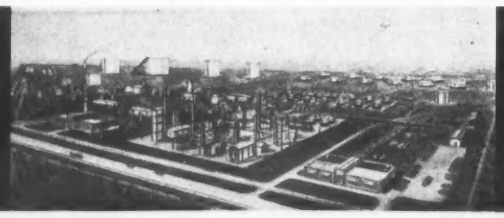
CHEMICAL ACTIVITY— from high unsaturation to practical inertness

COMPATIBILITY— Mostly soluble in oils and cheap hydrocarbon solvents. Some require aromatic solvents

HEAT RESISTANCE Generally excellent

ELECTRICAL PROPERTIES— Low power factors and dielectric constants

Produced By
THE VELSICOL CORPORATION
GENERAL OFFICES
120 E. PEARSON STREET • CHICAGO, ILLINOIS



PLANT
MARSHALL, ILLINOIS

Turpentine, spirits, gum, bbls., c.l., ex dock..gal. .82 - —
l.c.l., 10 ex dock.....gal. .84 - —
5 ex dock.....gal. .86 - —
wood, dest., dist., dms., dlvd. E. ports..gal. .65 - .70
tanks, dlvd., E. cities...gal. .58 - —
steam-dist., dms., c.l., dlvd.gal. .75 - —
l.c.l., dlvd.....gal. .78 - —
tanks, dlvd.....gal. .70 - —

U

Unicorn root, false (see Helonias root).
True (see Aletris root).
Uranium oxide, black, bgs....lb. 2.55 - —
yellow, kgs.....lb. 1.65 - —
Urea, dom., 46% N., bgs., 20 tons, f.o.b. Belle, W. Va., Metropolitan New York, Phila., Wilmington, Del., Baltimore, Wilmington, N. C., Charleston, Savannah, Jacksonville....ton.80.00 - —
l.c.l., f.o.b. Belle, W. Va. ton.82.50 - —
5-19 tons, f.o.b. Boston, New York, Philadelphia, Wilmington, Del., Baltimore..ton.85.00 - —
less than 5 tons, f.o.b. New York, Phila..ton.90.00 - —
import, 40% N., bgs., 5 tons, f.o.b. Atl., Gulf ports or Belle, W. Va., ship..ton. No prices
smaller lots, f.o.b. N. Y. whse..ton. No prices
pure, cs.....lb. .12 - —
Urea fertilizer compound, basis 42% N., bulk, c.l., f.o.b. Belle, W. Va., or Atl., Gulf ports..ton.57.40 - —
Urea-ammonia liquor, basis, 45% N., tanks, f.o.b. Belle, W. Va., or Atl., Gulf ports, ton.121.58 - —
37% N. (insoluble), f.o.b. Belle, W. Va., or Atl., Gulf ports. ton.127.00 - —
Uva ursi leaves, bls.....lb. .20 - .22

V

Valerian root, Belgian, bls....lb. 1.15 - 1.20
Eastern, bls.....lb. .75 - .80
Valonia, beards, bgs., f.a.s...ton. No prices
cups, bgs., f.a.s.....ton. No prices
Vanadium pentoxide, C.P., bgs., cns., works..lb. 7.00 - —
tech., dms., works.....lb. 1.10 - —
Vanilla beans, Bourbon, tins...lb. No prices
Mexican, tins.....lb.15.00 -16.00
cuts, tins.....lb.14.00 -15.00
South American, tins.....lb. No prices
Tahiti, tins.....lb. 6.00 - 6.25
Vanillin, ex eugenol, 25-lb. tins, lb. 2.60 - —
5-lb. tins.....lb. 2.65 - —
1-lb. tins.....lb. 2.75 - —
ex guaiacol, 25-lb. tins.....lb. 2.35 - —
5-lb. tins.....lb. 2.40 - —
1-lb. tins.....lb. 2.50 - —
ex lignin, any quantity, 25-lb. tins..lb. 2.35 - —
5-lb. tins.....lb. 2.40 - —
1-lb. tins.....lb. 2.55 - —
Venice turpentine, true, cs...lb. No prices
artificial, cs.....lb. .24 - .25
Verdigris, bbls., kgs.....lb. .22 - .23
Vinyl acetate, cns., works.....lb. .25 - —
dms., c.l., 30,000 lbs. gross, works..lb. .14 - —
l.c.l., works.....lb. .15 - —
5 gals, dms., works.....lb. .25 - —
Ether, 75 c.c.....bot. 1.30 - —
50 c.c.....bot. .73½- —
25 c.c.....bot. .45½- —
Vitamin B_1 (see Thiamine hydrochloride).
B_2 (see Riboflavin).
C (see Acid, ascorbic).
D (see Oils, codliver, halibut liver).
E (see Alpha Tocopherael)
G (see Riboflavin).
P-P (see Acid, nicotinic; acid, nicotinic, amide).
Violet, methyl, toner (see M).
V.M.P. naphtha (see petroleum naphtha, v.m.p.).

W

Wahoo bark, bls.....lb. .45 - .48
tree .....lb. .19 - .22
Wattle bark, bgs., f.a.s.....ton.41.00 -43.00
Extract, solid, bgs.....lb. .0460- .04475
liquid, tanks.....lb. .06 - —
bbls. .....lb. .05¾- —
Wax, amorphous, group 3, at refineries: 160-165, amber. lb. .15½- —
black .....lb. .14 - —
white .....lb. .26 - —
180-185, amber.....lb. .17½- —
black .....lb. .16 - —
white .....lb. .30 - —
Bayberry, bgs.....lb. .18 - .20
Bees,[2] white, bleach, slabs, cs. lb. .56 - —
cakes, cs.....lb. .57 - —
discs, cs.....lb. .58 - —
yellow, crude, Africa.....lb. .49 - —
Brazilian, Chilean, bgs., lb. .50 - —
refd., slabs, cs., lbs.....lb. .54 - —
Candelilla,[2] bgs., 1 ton.....lb. .33 - —
Carnauba,[2] No. 3 chalky, bgs., lb. .78 - —
No. 2, bgs.....lb. .84 - —
N. C., 3, bgs.....lb. .79 - —
refined, bgs.....lb. .84 - .85
yellow, No. 1, bgs.....lb. .88 - —
No. 2, bgs.....lb. .87 - —
Ceresin, dom., 138°, 140° m.p., bgs., 1 ton..lb. .13½- .14
jobbing lots.....lb. .14½- .15
150°-160° m.p., bgs., 1 ton..lb. .15½- .16
jobbing lots.....lb. .16½- .17
160° m.p., bgs., 1 ton.....lb. .16½- .17
jobbing lots.....lb. .17½- .18
Japan, cs.....lb. .30 - .31
Montan, bgs.....lb. .43 - .46
Ouricury,[2] bgs.....lb. .55 - .62
Ozokerite, hard, green, congeal. p. 66°-68° C., bgs..lb. No stocks
70°-72° C., bgs.....lb. No stocks
74°-76° C., bgs.....lb. No stocks
snow-white, pure, 76°-78° C., bgs..lb. No stocks
yellow, natural, 76°-78° C., bgs..lb. No stocks
Paraffin (see P).
Spermaceti, blocks, cs.....lb. .24 - .25
cakes, cs.....lb. .25 - .26
White lead (see Lead, white).
White pine bark, rossed, bls..lb. .07 - .08
White precipitate, powd., dms., 50 lbs. or more..lb. 2.84 - —
Whiting, chalk, com'l., dry-grd., pap. bgs., c.l., works, ton.18.00 -22.00
l.c.l., works.....ton.20.00 -24.00
wet-grd. blp. bgs., c.l., works..ton.21.00 -25.00
l.c.l., works.....ton.22.00 -27.00
gilders, bolted, pap. bgs., c.l., works..ton.20.00 -24.00
l.c.l., works.....ton.21.00 -24.00
extra bolted, pap. bgs., c.l., works..ton.22.00 -26.00
l.c.l., works.....ton.23.00 -27.00
Paris white, pap. bgs., c.l., works..ton.24.00 -28.00
l.c.l., works.....ton.25.00 -29.00
Limestone, air-floated, 99¾%, 250 mesh, pap. bgs., c.l., works..ton.10.10 - —
200 mesh, pap. bgs., c.l., works..ton. 9.50 - —
99%, 200 mesh, pap. bgs., c.l., works..ton. 7.60 - —
gilders, pap. bgs., c.l., works, ton.11.50 -13.00
l.c.l., works.....ton.12.50 -16.00
putty grade, water-floated, bgs., c.l., works..ton.12.00 -13.00
l.c.l., works.....ton.13.00 -16.00
precipitated, bgs., c.l., works, ton.14.00 -15.00
l.c.l., works.....ton.18.00 -25.00
Wild cherry bark, thick, natural, bls..lb. .07 - .08
rossed, bls.....lb. .05 - .06
thin, natural, bls.....lb. .07½- .09
rossed, green, bls.....lb. .13 - .15
Wild indigo root, bls.....lb. .13 - .14
Witch-hazel extract, dist., NF, bbls..gal. .72 - .75
leaves, bls.....lb. .07 - .09
Witherite (see Barium carbonate, natural).
Woodflour, dom., 80 mesh, bgs., c.l., f.o.b. N.Y..ton.24.00 -25.00
80 mesh, same basis.....ton.26.00 -28.00
100 mesh, same basis.....ton.30.00 -32.00
import, 70 mesh, bgs., ex dock..ton. No prices
80 mesh, bgs., ex dock..ton. No prices
100 mesh, bgs., ex dock..ton. No prices
120 mesh, bgs., ex dock..ton. No prices
Wormseed, American, bgs.....lb. .07 - .08
Levant, bgs.....lb. 4.50 - 5.00
Wormwood, bls.....lb. .48 - .50

X

Xylol[2] (xylene), indus., dms., returnable, works..gal. .32 - —
tanks, E. of Omaha, frt. alld., gal. .27 - —
tanks, W. of Coast, f.o.b. Minnequa, Colo..gal. .27 - —
10°, dms., returnable, works, gal. .35 - —
tanks, E. of Omaha, frt. alld., gal. .30 - —
5°, dms., returnable, works..gal. .30 - —
tanks, E. of Omaha, frt. alld., gal. .40 - —
3°, dms., returnable, works..gal. .49 - —
tanks, E. of Omaha, frt. alld., gal. .47 - —
Xylidin, mixed, dms.....lb. .35 - .36

Turpentnie—Yellow, Chrome

Y

Yara yara, cryst., cns.....lb. 1.80 - 1.85
Yellow,[2] arsenic sulphide, dom., bbls., f.o.b. New York..lb. .52 - .55
bottles, same basis.....lb. .60 - .64
imp., bbls., same basis.....lb. .20 Nom.
Benzidine, bbls., dlvd.....lb. 1.35 - 2.25
Cadmium, CP, import, bxs..lb. 1.35 - 1.40
lithopone, primrose, lemon, golden and standard orange, ton lots, bbls. lb. .55 - —
400-2,000 lbs., bbls.....lb. .60 - —
100-300 lbs., pkgs.....lb. .65 - —
Yellow cadmium lithopone prices are f.o.b. Balto. or whse. points, transportation prepaid or allowed E. of Rockies.
Sulphide, orange, cases, works, lb. 1.10 Nom.
Chrome, CP, bbls., dlvd. No. of Tenn. and N. C., E. of Miss. R., including Davenport, Minneapolis, Rock Island, St. Louis, St. Paul, contracts..lb. .16 - —
Chrome yellow, CP prices are ¼c. higher, dlvd. Ala., Fla., Ga., La. (Shreveport, 1¼c.), Miss., N. C., S. C., Tenn., Tex., (Dallas, 1¼c.; Ft. Worth, 1½c.; El Paso, 2c.) Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1c. higher dlvd. Pac. coast; for Denver, Pueblo, Salt Lake City, Wichita, prices are equalized with Chicago.
Dutch, pink, bbls.....lb. .09 - .11

—*Continued on page* 108

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Beating Autos Into Planes

A trifle late, from the viewpoint of all that might have been best for the national welfare, but nonetheless earnestly, United States industry is sitting down to study its part in assuring early United States victory in the "shooting war" which has finally awakened the people to a recognition of their status, that averages about fair. There is yet a long way to go—especially for the antagonistically embattled farm-leaders and a few misanthropic industrial camp-followers, both of which groups measure general welfare solely by terms of their own profits.

It is to be desired, but it is scarcely to be hoped, that Congress will lay the inevitably heavy tax burden of victory-striving equitably. This has never been done. But, many conditions to be met today have no precedents and call for similarity in pioneering initiative in order that they may not only be met but also be mastered. Not all the handicaps to early victory are in the hands of the nation's declared enemies.

A survey of the automotive industry is being made to ascertain how and when it can be converted to mass production of airplanes. This conversion was urged a year ago, but was dismissed, first, as impracticable, then, as something portentous of Communistic schemes. Such a conversion cannot be accomplished in a few weeks, for there are many machines and many men to be readjusted in order that the new purpose may properly be effectuated. It should have been undertaken one step at a time at best a year ago—and if necessary half the automobiles which clutter busy streets should have been commandeered and converted into airplane materials.

It is far past the best time to start converting all possible industrial facilities to the tasks of victory. A full start is to be expected, because United States industry has got tired waiting to be invited, waiting for some usually poorly informed O.K.-er to decide upon what is wanted. Business has set down to study and is beginning to stand up to work for victory.

A Foretaste of War

The OPM orders of last week, having to do with ethyl alcohol, methanol, and molasses, make more intense—and somewhat bitterer to many—the foretaste of war's restrictions and inflictions on the customary pattern of living, which was given by the earlier restricting of automobile tires. The later orders make it plain that there is no "here" where the pinch of war can't happen, and will not happen.

The Director of Priorities must act in such matters according to his lights. That what he orders now appears to be extraordinarily severe is owing wholly to the fact that there long was official reluctance to impose restrictions clearly inevitable, because of a well-substantiated belief that the public was not in a mood for even nibbling at any anything which it had come to regard as its right. There is a deal of truth in the old saying about cutting off a dog's tail all at once, but the loss always seems the greater because of its suddenness.

It is not the desire nor the intention of OPM or OPA to work exceptional or unreasonable hardships by orders mandatorily dictated by the demands of war. The ethyl alcohol, methanol, and molasses orders testify to this purpose in various respects, once the imperative nature of the war needs for these materials is appreciated. In truth, the molasses order appears to grant much leeway by the provisions of its (C) (3). Due provision is made in all the orders for appeals by persons who consider themselves injured by the requirements. This policy has substantially eased and sometimes vitiated other orders, but it is to be assumed that the officials have been hardened meanwhile by the actuality of war.

The restrictions on tires, and alcohols, and molasses are but the earliest of many which must be expected. Inevitably the orders to come will progressively narrow the field of business activities in civilian services and necessitate readjustments which will not always be simple or easy. That is one of the demands of war, and rigorous as it may be, it is far more to be desired than are the clearly forecast consequences of a war lost to the ruthless enemies by which this nation is opposed.

BUY BONDS FOR VICTORY

U.S.P. Reformation

The special committee created at the 1940 session of the United States Pharmacopeial Convention has submitted a draft of a new constitution and by-laws. This will be acted upon at a supplementary session of the convention in April. It is designed to make future conventions less unwieldly in size and to assure well-qualified, expert service in the work of revision. The draft reaches well toward these objectives.

Representation in future conventions will be limited to one delegate from each institutional member—and the delegate will have to be actually and actively connected with the institution or organization which he represents. Local organizations—unless those of the District of Columbia may be so classified—will not be entitled to membership. Acceptable State pharmaceutical organizations apparently must be affiliated with the American Pharmaceutical Association. No provision is made for the admission of new members. If any substantial part of the much heralded "new order" or pattern of national life shall eventuate, it will be necessary at least to amend the constitution in this respect.

A director of pharmacopeial revision will replace the present chairman of the revision committee and he will be elected by the board of trustees at the suggestion of the nominating committee which will in largest part be chairmen elected by revision subcommittees set up by the director. There is a hint of a little "close harmony" there. The director may have an assistant. The same nominating committee will present a double ticket of nominees for subsequent committees of revision, but such nominations may also be made from the floor, as must all nominations for officers and the six elected members of the decennial board of trustees. It was not found practicable to carry out the 1940 convention's advice that the official terms of the trustees overlap.

According to the proposed by-laws the pharmacopeia would be issued in revised form at approximately five-year intervals. Supplements also are provided for as necessary and practicable. Annual publication of financial reports by the board of trustees is proposed, also publication of statement of honoraria after each revision.

The proposed U.S.P. reformation—even to the elimination of the diphthong in the word, "pharmacopeia"—is headed in a desirable direction. It goes far enough to assure a substantial reduction in the politics of recent decades and to preclude the more or less justified charges of secrecy. Whether it will achieve better service in revision will depend, although in far lesser degree than in the past, on "human nature." But, it holds a promise of improving that inevitable factor.

BUY BONDS FOR VICTORY

A Record of Change

If, as Marcus Aurelius said, "everything is the result of a change," the year 1941 should be a most resultful one, because it changed many things much. And, in respect of changes in business policies, processes, and products—numerous and revolutionary as they have been—the most is yet to come. Whether that will be also the best, or the worst, can not be foretold: too many variable factors will be at work.

Out of the past one can draw much that is informative of the future—if he be not too regardful of indications to the exclusion of connotations; for it is only the full significance of factual data which is properly informative: half-truths result in infererences which always mislead. So, the records of 1941 provide a step in knowledge toward understanding and expectations of the days to come. Although business events, like history, do not repeat themselves in exact detail, they do recur in but slightly different form. Best of all, they point trends; those who follow these must know how to adjust their pace.

And so, there is a great deal of usefulness for today, tomorrow, and for many days to come in the records of 1941 in the chemical, oil, and drug industries and the interpretative commentaries thereon—all of which appear in readily informative fashion on pages 33 to 96 of this number of Oil, Paint and Drug Reporter. Extra copies of this review and forecast will be available, separately bound, at the nominal cost of 25 cents each.

BLUEPRINTS AND THE DEFENSE PROGRAM

EVERY battleship, every airplane, every tank, every gun, and nearly every one of the innumerable other items directly or indirectly connected with our National Defense Program is at one stage of its production merely a pile of blueprints. In the case of a battleship, however, this pile may weigh several tons.

It is easy to see then that the Defense Program has resulted in a tremendous increase in the demand for blueprint paper. This naturally has been reflected in the consumption of the chemicals used in producing this paper. One of the most necessary of these essential chemicals is Iron and Ammonium Oxalate, used in practically all blueprint formulas. Chas. Pfizer & Co., Inc. have been for a number of years probably the largest producer in this country of Iron and Ammonium Oxalate, and are in addition manufacturers of a number of other chemicals used in the preparation of blueprint paper including: Iron and Sodium Oxalate, Iron Oxalate, Iron and Ammonium Citrate, Ammonium Oxalate, Potassium Oxalate. Naturally the large increase in demand for these chemicals has placed a great strain on our productive facilities, but, realizing their essential nature, we are exerting ourselves to the utmost to make them available in sufficient quantities.

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(Parenthetical figures are the numbers of patents in the United States or other countries, as designated)

6-Acetamido-2-paraethylbeta-hydroxyethylamino-1-methyl-quinolinium Methiodide

Pharmaceutical

Claimed (Brit. 495783) to be—
Valuable as trypanocide advantageous in being more soluble and less toxic than known 2-styrylquinolinium salts

Acetoacetylalphanaphthylamine

Dye

New intermediate for making—
Yellow dyestuffs of the Hansa yellow type, also variations of yellow shades

Anise

(Anace, Aneys, Anice, Anis, Anis Vert, Anise Seed, Aniseed, Anisfruechte, Anisi Fructus, Anison, Anissamen, Anisum, Anny, Annyle, Fructus Anisi, Fruto de Anis, Graines d'Anis, Semen Anisi Vulgaris, Semi d'Aniso, Simiente de Anis)

(The dried, ripe fruit of Pimpinella Anisum, L. (Fam. umbelliferae). The plant is a native of Egypt and the Levant, but has been introduced in most warm climates; now cultivated in southern Europe. Germany, Russia, Spain, Italy, France, Turkey, India, Japan, Chili, other parts of South America, and the United States—it is often adulterated with other seeds and vegetable matter, fine gravel, an argillaceous earth, weed seeds, and stems of the anise plant—Russian anise is said to be sometimes admixed with as much as 30 percent of coriander, while Italian anise is also said to be admixed with from 2 to 10 percent, even 50 percent, of conium fruits)

Aromatics

Source of—
Anise oil

Distilled Beverage

Starting point in making—
Essence of anis
Flavoring agents for cordials and liqueurs

Food

Starting point in making—
Flavoring agents for candy, condiments, and the like

Pharmaceutical

Reported useful, in decoctions, infusions, teas, as—
Aromatic Carminative
Corrigent of griping or unpleasant medicines
Cough sedative Stomachic

Aluminum Boroformate

(Aluminiumboroformiat, Boroformiate Aluminique, Boroformiate d'Aluminium, Boroformiato di Alluminio, Boroformiate Aluminico, Boroformiate de Aluminio, Tonerdeboroformiat)

Pharmaceutical

In compounding and dispensing practice

Ingredient of—
Gargles reputed useful in treating throat infections

Reputed useful as—
Astringent Disinfectant

Ammonium Borofluoride

(Ammonborofluorid, Borofluorammoniak, Borofluorammonium, Borofluoro di Ammonio, Borofluoro Amonico, Borofluoro de Amonio, Borofluorure d'Ammoniaque, Borofluorure d'Ammonium)

Aviation

Ingredient of—
Moulding (parting) sand composition used in casting processes for aviation engines

2:6-Bis-(Para-anilinesulphonamido)naphthalene

Pharmaceutical

Claimed (Brit. 502173) to be—
Valuable for treating bacterial infectious diseases

Bromocarvacrol Betathiocyanoethylether

Insecticide

Claimed (U.S. 2185184) as—
Insecticidal toxicant soluble in petroleum distillates

4-Chlor-3'-methoxy-5:6-benzoquinolin

Pharmaceutical

Claimed (Brit. 481874) to be—
Useful in destroying blood parasites (maleria), amebae, and worm infections

10-Deltadiethylaminoalpha-methylbutylamino-7-methoxy-3-methylacridin Citrate

Pharmaceutical

Claimed (Brit. 441007, 441132, and addition to 363392) as—
New pharmaceutical

Dicresylpyridinium Thiophosphite

Lubricant

Starting point (Brit. 457548) in making—
High-pressure lubricants, die-making lubricants, and boring, drilling, cutting, and wire-drawing oils by solution, dispersion, or emulsification in carriers, such as mineral, vegetable, or animal oils, paraffin, water, graphite, grease, or porous bearing metal

Di-tertiary-amylphenol Disulphide

Rubber

Stabilizer (Brit. 488866) for—
Synthetic rubberlike materials such as—
Polymers of butadiene, 2-chlorobutadiene, dimethylbutadiene, and isoprene
Joint polymers of the foregoing substances with acrylic nitrile, styrene, and other polymerizable substances

Ethyl Beta-2-furylacrylate

Rubber

Starting point (Brit. 516776) in making—
Polymerized products with—
Ethylene
Methyl derivatives of ethylene
Starting point (Brit. 516776) in making—
Polymerized products, latex, which can be coagulated to rubberlike materials (said products are claimed to be compoundable and vulcanisable, to have better resistance than natural rubber to oils and solvents, and to be tough and resilient)

Ethyl-Mercury Sulphate

Rubber

Preservative (Brit. 499578) for—
Latex

9-Ethyltridecanol 6-Sulphate-ester

Chemical

Emulsifying agent (Brit. 461662) in making—
Chemical specialties
Emulsions of various chemicals

Fats, Oils, and Waxes

Emulsifying agent (Brit. 461662) for—
Fats Oils
Waxes

Leather

Emulsifying agent (Brit. 461662) in making—
Dressing compositions
Finishing compositions
Soaking compositions
Softening compositions
Waterproofing compositions

Miscellaneous

Emulsifying agent (Brit. 461662) for making emulsions of various products

Paper

Emulsifying agent (Brit. 461662) in making—
Coating compositions
Sizing compositions
Waterproofing compositions
Waxing compositions

Textile

Emulsifying agent (Brit. 461662) in making—
Emulsified compositions used in—
Bleaching processes
Dyeing processes
Finishing processes
Manufacturing processes
Printing processes

Ferrous Gluconate

Pharmaceutical

Reported useful as—
Tonic

1-Furoylacetimido-2-ethyl-dihydrobenzothiazole

Photographic

Color-former (Brit. 517197) in—
Developing processes for producing—
Yellow images from silver salts
Film emulsions

Guayule Rubber

(A rubber obtained from a plant known as Parthenium argentatum which is fairly closely related to the sunflower of the compositae—it is of interest as being the only plant in this large order known to produce rubber—it is a small herbaceous plant, or shrub, varying in height from a few inches to between three feet and four feet and is found in northern Mexico and at present is grown on a limited scale in the southwestern United States—the rubber contained in this plant cannot be obtained by tapping, as in ordinary rubber trees—the procedure is to cut down the whole plant and extract the rubber either by the use of solvents or by mechanical means—it is reported to be somewhat soft and sticky, but of fair quality—the crude contains over 20 percent of resins, but these can be partly removed by proper treatment)

Rubber

Compounding ingredient in—
Rubber batches
Domestic source of—
Crude rubber
Substitute for—
Imported rubber (reported by a leasing rubber company as a definite possibility for increasing the supply of the United States)

2-Hydroxy-2'-parachloro-phenyl-5:6-psinaphthazimide

Dye

Claimed (Brit. 516585) as—
Dyestuff having a high affinity for cellulosic fibers

2-Imino-1-methylquinolin

Chemical

Reactant in—
Organic syntheses

Photographic

Starting point (Brit. 517197) in making—
Color-forming agents for photographic emulsions or for photographic developing processes

Orthodibenzylaminophenol

Petroleum

Gum inhibitor (U.S. 1980200 and 1980201) for—
Motor fuels

2-Para-aminobenzenesulphonamido-4-methyl-5-hydroxyethyl-thiazole

Pharmaceutical

Claimed (Brit. 517272) as—
Therapeutically useful new compound

3-Phenyl-5-acetanilidomethyl-enerhodanin

Photographic

Starting point (Brit. 517769) in making—
Sensitizer dyes for silver halide emulsions with—
Morpholin Piperidin

3-Phenyl-5-(1-piperidyl)-methylenerhodanin

Photographic

Dye (Brit. 517769) for—
Photographic films (gives yellow colors in water, alcohol, or methanol)
Sensitizer (Brit. 517769) in—
Silver halide emulsions for photographic films

1:2:3-Triazole of 1:2-Diamino-4-benzoylaminoanthraquinone

Dye

Starting point (Brit. 506761) in making—
Brown vat dyes with the aid of—
1:2-Naphthoquinones which are unsubstituted in the quinonoid nucleus
1:2-Naphthoquinones having in 4-position a sulphonic acid radicle and being unsubstituted in 3-position
1:4-Naphthoquinones which are unsubstituted in the quinonoid nucleus

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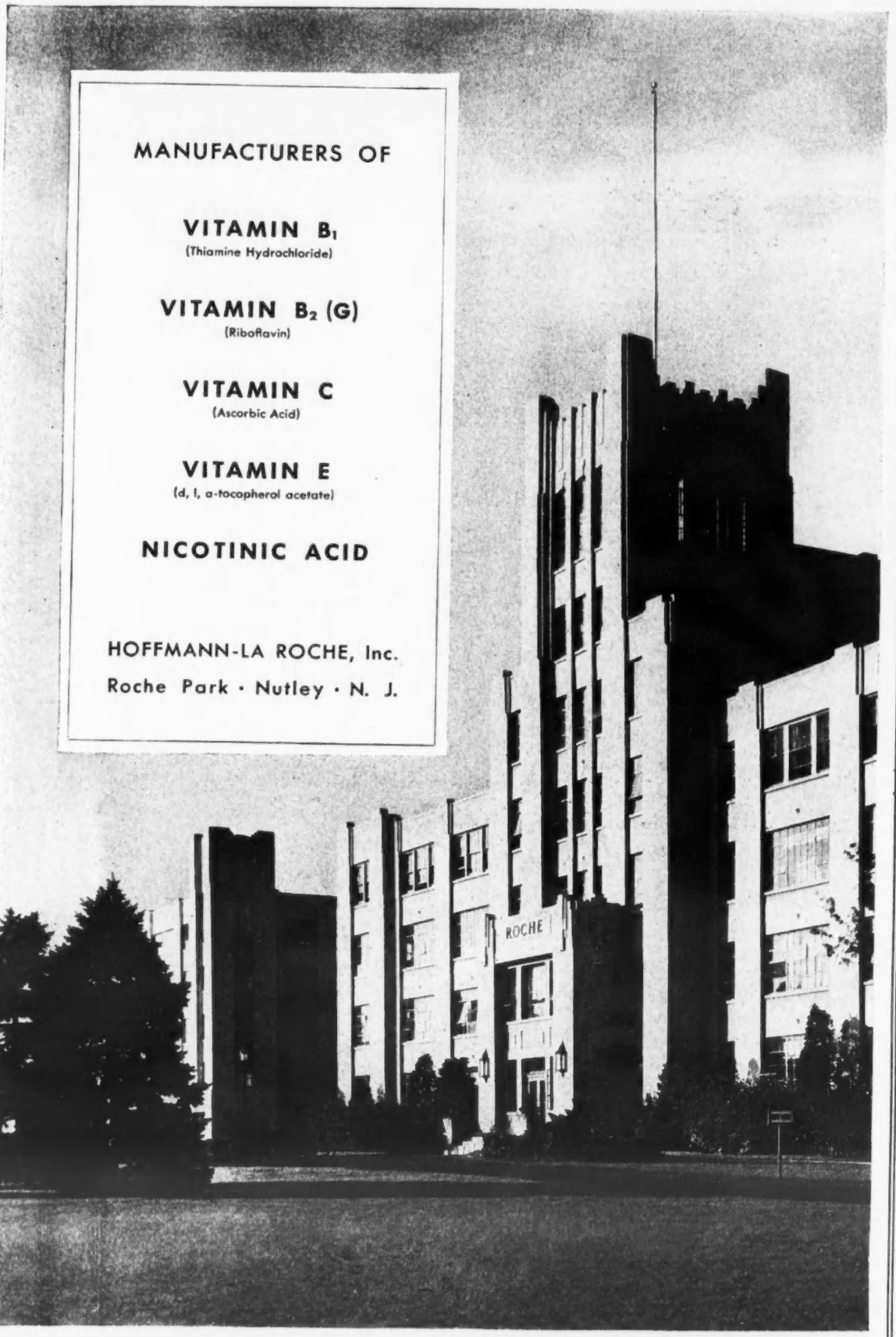

Contents Of This Section

1941: A Year of Economic Transitions 35
- Aspects of the Transition 35
- Supervision of Production 35
- Materials' Scarcity Problem 35
- Contributory Foreign Events 35

Leon Henderson's Views 35

Defense Materials Supply 36
- Information Scanty 36
- Petroleum Contributions 36

Defense Materials Controls 36
- 'P' Orders 36
- 'M' Orders 36
- 'L' Orders 36

Efforts to Keep Prices Down 36
- Conversations Inadequate 36
- Price Ceilings 38
- Price Agreements 38

Taxes Big and Growing 38
- Hunting New Sources 38
- Retail Cosmetic Tax 38

Antitrust Law Litigation 38
- Litigation Plentiful 38
- A.M.A. Convicted 40

Federal Trade Commission Work 40
- Investigations Current 40
- Commission Recommendations 40
- Corporation Reports 40
- Distribution Cost Accounting 40
- Distribution Methods and Cost 40
- Resale Price-Maintenance 40
- Mass Food Distributors 40
- General Legal Work 40
- Trade Practice Rules 40

Drug Control Tightened 42
- Retailing Under Scrutiny 42
- Trade Marks as Common Names 42
- Manufacturing Control 42
- Oleomargarin Fight 42
- Vitamin Labeling 42

Petroleum Industry Nationalized 42
- Oil Pipes for Defense 42
- Gasoline Service Curtailed 42
- Oil Prices Controlled 42

Foreign Trading Controlled 44
- Economic Defense Scheme 44
- Importing Supervised 44
- Black Lists and Blocked Funds 44
- Export Control 44

More Tariff Bargains Made 44

U. S. Bauxite Resources Sufficient for Six Years 44

Trends of Things Through 1941 . 46
- Money Earned and Spent 46
- Making More Things 46
- More Work: More Pay 46
- Sales Soared 46
- Inventories Increased 49

Chemicals, Oils, and Drugs Price Trend Over 1941 46

Plant Expansions in 1941 48

OPD Markets During 1941:—
- Botanical Drugs, Spices, Gums 71
- Coaltar Chemicals 56
- Drugs and Fine Chemicals 68
- Dyestuff, Textile and Leather Chemicals 60
- Essential Oils and Aromatics 73
- Fertilizer Materials 74
- Heavy Chemicals 52
- Oils, Fats and Waxes 77
- Paint, Varnish and Lacquer Materials 62
- Petroleum Products 75

Imports Into the United States .. 81

Exports From the United States . 82

Trade Leaders Review and Forecast 83

NICOTINIC ACID DERIVATIVES

ACETYL-p-AMINOPHENYL SALICYLATE

CHOLIC ACID AND DERIVATIVES

FOLLICULIN AND OTHER NATURAL HORMONES

VEGETABLE ALKALOIDS

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1941: A Year of Economic Transitions

The year 1941 goes down in history as the year when the European war turned into a world war, a war which in intensity, territorial spread, and number of nations involved is far more completely a world war than the 1914-1918 conflict.

In the United States, 1941 marked the transition from defense preparations to all-out shooting warfare. In January the nation was still hopefully determined to stay out of war and was not yet convinced that the defense program need prevent carrying on business as usual. In December, United States territory was attacked and invaded and our entire economy was under government control and directed to the single aim of winning the war at any cost.

While the attack on our Pacific outposts December 7 was sudden, the internal transition from a defense program to a war basis was taking place throughout the entire year, and when Congress, December 8, declared that a state of war existed, the nation's business and the government's control machinery were already fairly well adjusted to the requirements of total warfare, military, and economic.

Aspects of the Transition

Among the many high points in this transition may be mentioned appropriation of billions of dollars for production of war materials, construction of scores of new factories, the lend-lease program, strict regulation of foreign trade and foreign funds, control of prices of a growing list of commodities, priority and allocation restrictions on the use of most important materials, curtailment of civilian business, draft of manpower for the military services, heavy new business taxation, and the imposition of actual or potential control of every phase of business life through emergency or war powers of the Executive.

The imposition of a group of rapidly growing defense agencies on top of the existing structure of governmental activities made Washington a hectic and crowded capital and the Mecca of all businessmen seeking information and guidance about adapting their businesses to war conditions. The established governmental agencies, for the most part, attempted to continue their routine functions, but their importance and the business significance of their actions was largely lost in the overshadowing defense program. Outbreak of war brought suggestions to curtail the appropriations and activities of many of these routine government agencies, and to move them out of Washington to make room for war work; and while the administration adopted the policy of retaining all social gains of the first eight years of the New Deal, the war developments of 1941 brought a complete halt to all attempts at further social and economic reform.

President Roosevelt was inaugurated January 20, 1941, as the first third-term President in history, but even before this event he set in motion plans which during the year put the United States completely on to a war footing. January 6 he sent a message to Congress asking for all-out aid to the democracies; a few days later the lend-lease bill was introduced and after lengthy debate it became law March 11. Under this law the United States began sending several billion dollars' worth of goods of all kinds to England and other nations, and the purchasing activities involved had a marked effect on the supply and market situation of many commodities.

Supervision of Production

In response to demands for more direct supervision of defense production, the President, January 7, created the Office of Production Management, embodying the most important functions of the old National Defense Advisory Commission. In the months that followed the initials, "OPM", became the most important term in the lexicon of government regulation of business, and the agency itself continually expanded, through several major and minor reorganizations, bringing in experts from every line of business to plan military procurement and attendant curtailment of civilian use.

Most important to business of all OPM activities were those of its Division of Priorities, which placed restrictions on nondefense uses of materials through a series of orders so numerous and so inclusive as to keep most business in a constant state of perplexity. The priority system inherited by OPM from the old Defense Advisory Committee was little more than a method for indicating the order in which army and navy contracts were to be filled, but as the defense and lend-lease programs demanded more and more of the country's productive capacity, shortages and bottlenecks developed which required OPM to place increasingly severe restrictions on materials uses.

Late in August the President delegated to the Director of Priorities sweeping powers to impose priorities of all sorts, and thereafter all priority orders were mandatory and their nature steadily grew more drastic. At the same time the President created the Supply Priorities and Allocations Board representing the army, navy, lend-lease Administration, and other agencies concerned with procurement, with powers to decide among conflicting demands for materials and set policies for the Priorities Division. By the end of the year SPAB and OPM were working toward a system of complete allocation of all strategic materials among all essential uses, but even before this objective had been fully reached, OPM had taken complete control of the supplies of a number of commodities and allowed sales only as specifically permitted and directed by it.

Among priority actions of most widespread application was a plan to provide maintenance and repair materials for all industry, which underwent several revisions before emerging as a workable plan in order No. P-100. In preparation for complete allocations, OPM announced in December a production requirements plan under which all manufacturers using scarce materials make quarterly estimates of their needs and are given preference ratings for such materials as OPM feels can be allocated to those uses.

Materials' Scarcity Problem

Commodities of many sorts became progressively scarcer during the year, not only because of the defense program but because of difficulties of importing. An export control system was set up and continually expanded for the dual purpose of keeping essential materials within the country and of preventing them from going to the Axis powers. The government spent vast sums in constructing new plants for the production of strategic materials and expanded its program of purchasing raw materials in foreign countries to build up reserve stockpiles.

All merchant shipping was brought under control of the Maritime Commission even before war was declared, so that routes, rates and allocation of cargo space were regulated in the interests of the national program. In March the government seized Axis shipping tied up in American ports and later took over laid up vessels owned by other countries, and put these ships to work in our own service.

Congress was in continuous session throughout the year, the longest session in its history, but enacted little legislation of importance not related to national defense. It passed a huge tax bill adding some $3,500,000,000 of revenue annually, appropriated close to $60,000,000,000, and authorized a defense program twice that large. Congress continually added to the President's emergency powers, and after the declaration of war it rushed through a war powers act re-enacting much World War I legislation and giving President Roosevelt more power than any American executive has ever wielded. The limited national emergency which had been in effect for the past year and a half was changed to a full emergency by proclamation of the President May 27.

Contributory Foreign Events

While the domestic economy was being prepared for war, rapid developments occurred in the field of foreign affairs. American relations with the Axis grew steadily more strained and the United States became more and more involved in the fate of other democracies. Outstanding among these events were:—

January 6—President Roosevelt asked Congress for all-out aid to the democracies.

Leon Henderson's Views

The Administrator of the Office of Price Administration writes January 3, 1942, to the Editor of OIL, PAINT AND DRUG REPORTER *for the industries which it represents*

I welcome this opportunity to express to the producers and marketers of the chemical, oil, drug, and paint industry, through your valued publication, our appreciation of their assistance and cooperation in carrying out the task delegated to the Office of Price Administration.

In these emergency times, when the normal channels of commodity distribution are being upset, and the supply of commodities in many cases cannot be increased as the demands have increased, the stage is set for the inflation of prices uncontrolled by the normal balancing effect of supply and demand. You, together with the members of other industries, by your cooperative restraint, are helping the nation as a whole in solving its present serious problems and, at the same time, are helping yourselves as a part of that nation.

The prospect of raising prices in times of short supply is alluring when viewed in a limited field of vision, particularly where profits have been scant over the past decade. When viewed, however, in its broadest field, the raising of all prices avails to no one an advantage. The increased earnings purchase less and the purchasing power of fixed incomes approaches zero.

We know that you, in the main, recognize these facts because of our personal discussions with you and because of your actions in making our task as easy as possible. Our work is necessary because a few people, unable to recognize the pitfalls of price inflation, are guided by the immediate profits they can gain by raising prices and not the effect which their action imposes upon the nation and its people in this time of dire stress.

Because of the nation's situation, the rise of some prices will be found to be necessary, and the Office of Price Administration will endeavor to recognize such situations and treat them fairly in the interests of all concerned. When we fail to recognize such situations, we will appreciate your criticism and your cooperation in working out a fair and equitable adjustment.

In closing let me thank you for your efforts toward reporting the price situation in the industry fairly and without hysteria.

March 11—Lend-Lease bill became law.

March 30—United States seizes Axis shipping in American ports.

April 10—United States assumes protection of Greenland.

April 30—United States Navy begins patrol of Atlantic defense zones.

June 14—All assets of Axis nationals in the United States frozen.

June 16—German and Italian consulates in the United States closed.

June 24—President announces lend-lease aid for Russia.

June 25—Japanese assets in the United States frozen.

August 1—Export of aviation fuel to Japan prohibited.

September 11—President Roosevelt orders the navy to shoot German vessels on sight.

November 17—Neutrality act amended to permit arming of ships and ending restricted shipping zones.

November 24—United States occupies Dutch Guiana to protect bauxite sources.

December 8—Congress declared a state of war with Japan.

December 11—Germany and Italy declared to be at war with the United States.

December 15.—Congress passed emegency $10,000,000,000 war appropriation.

December 19—Draft act extended to men of from twenty to forty-four years.

Defense Materials Supply

The capacity of the United States for producing strategic materials of many sorts was greatly expanded during 1941 under the demands of the defense program. Private industry, particularly in the metal and chemical fields, engaged in countless programs of plant expansion, and the Federal government itself entered the field by financing the construction of dozens of plants of various sorts. The government also engaged in a large-scale program of purchasing raw materials abroad to build up stockpiles for a war reserve and for use by the Army and Navy and their contractors.

In spite of these activities, the country found itself short of sufficient of scores of vital raw materials because of their heavy use in producing the implements of war for our own defense and to supply other democracies resisting aggression. But the program promised a postwar period of plenty as regards several raw materials, with the prospect of developing many new uses for such articles as plastics, synthetic rubber, magnesium, and aluminum.

The use ot private capital in constructing facilities for the production of materials needed for defense was aided by an amendment to the Federal tax laws permitting the amortization, for income tax purposes, of such investments if certified by the War Department or the Navy Department as essential to the defense program. Most of the direct government activities were conducted by various units of the Federal Loan Agency, such as the Reconstruction Finance Corporation, Metals Reserve Company, Rubber Reserve Company, Defense Plant Corporation, and Export-Import Bank. Loans were made for the construction of new plants, acquisition of equipment, and purchase of foreign raw materials, and these agencies also made direct purchases of both foreign and domestic raw materials and built new plants which were leased or operated under contract with private concerns.

Information Scanty

Details of these purchases, loans, and agreements were for the most part surrounded with considerable secrecy, and when war was declared in December there was a complete closing off of information on contracts. Particularly lacking was information on the amounts of foreign raw materials purchased and their disposition, and on the current rates of production of many new plants.

Among the foreign supplies acquired in considerable quantities were rubber, tin, manganese, copper, sodium nitrate, quartz crystal, industrial diamonds, and nonferrous and alloying metals of all kinds. The government also offered to purchase for stockpile purposes considerable quantities of domestic manganese and other nonferrous metals.

Construction of the first important tin smelter in the United States was started in Texas by the RFC, to be operated under contract with a Netherlands concern in smelting Bolivian and East Indian tin ore. Largely with government financing, the capacity to produce aluminum and magnesium metal was expanded manyfold, and at the end of the year several of these plants were already in production while others were in various stages of construction.

Petroleum Contributions

A large government-financed plant for the production of toluene from petroleum, a new source, was put into operation in Texas. Late in the year the government began giving financial assistance to the petroleum industry to expand by threefold or more its capacity to produce 100-octane aviation gasoline.

A small but highly important program for producing synthetic rubber from butadiene, a petroleum product, was financed by the government in cooperation with three private firms, and at the end of the year there were plans for expanding this program even further because of the virtual termination of imports of crude rubber from the south Pacific.

In spite of these efforts by government and private business to expand the supplies of essential materials, shortages developed in practically all of them during the year. The Office of Production Management was forced to institute curtailment programs and limit the uses of such things as copper, aluminum, rubber, tin, plastics, and a great many chemicals. As a result of this and of the general increase in demand for almost everything caused by the defense program and the high level of business activity, virtually every industry was forced to hunt for possible substitutes and for ways to conserve the supplies of most basic raw and intermediate materials.

Defense Materials Controls

Attempts to assure supplies of materials essential to defense production first took the form of the Critical List of the Army and Navy Munitions Board. This was recognized by OPM as the catalog of materials on which the army and navy was to have first call.

As defense work spread, the need for keeping that production supplied with materials put more or less severe crimps in supplies for civilian production. To meet this situation OPM devised and frequently revised a scheme of priorities, general preferences, and so on. Control by these means was applied at both ends—production and consumption—and naturally was felt in distribution.

This scheme was fundamentally revised, effective for the first quarter of 1942, so as to introduce a request for advance information on needs of materials. Data on inventories also was collected, and the limited inventory plan originally applied to metals on the Critical List was replaced with a provision in General Preference Order No. 1 which limited purchases and sales of all materials. The latest move is to confiscate and reallocate individual inventories of materials considered excessive.

Gradually the control scheme is evolving into a grand plan of allocation. Meanwhile the following methods apply as noted (also to many other items not of interest here):—

'P' Orders

"P" orders are used in the scheme of priorities to assign blanket preference ratings to a company or companies engaged in important work.

Among the articles to which such orders have been applied are those listed below. The "PD" numbers in the list refer to the related Priorities Division forms. The dates are those of expirations of the "P" orders.

Explosives, industrial, materials for production of—P-86; PD-82; rating, A-8; until revoked.

Health supplies—P-29, amendment No. 1; PD-79 and 81; rating, A-10; until revoked.

Insecticides, germicides, and fungicides, material for production of—P-87; PD-81, 81a, and 82; rating, A-10; until revoked.

Laboratory equipment and reagent chemicals—P-62; PD-82, 93, and 93a; rating, A-1-F; March 31, 1942.

Maintenance and repair—P-22, amendment No. 1; rating, A-10; April 1, 1942.

Maintenance and repair materials for smelters and refiners of antimony, cobalt, copper, lead, mercury, zinc—P-73; rating as assigned; December 22, 1941.

Paints, marine—P-65; PD-81; rating, A-1-F; March 31, 1942.

Petroleum, materials for industry—P-82; PD-82 and 82a; until revoked.

Production requirements plan — P-90 (superseded P-6); PD-25a; various ratings; until revoked.

Research laboratories supplies—P-43; PD-88, 93, and 107; rating, A-2; February 28, 1942.

'M' Orders

"M" orders are used in the scheme of priorities to impose priority control over raw materials.

Among the materials thus controlled are those below. "PD" numbers refer to the related Priorities Division forms; the dates are those of expiration of the "M" orders. "M" orders regulate distribution of materials; "P" orders are designed to help users get materials they need.

Aluminum scrap—M-1c and d; PD-39, 40, and 114; indefinite.

Borax and boric acid—M-7 and 7a; PD-31; August 30, 1941.

Bristles, pig and hog—M-51 and 51a.

Burlap—M-47, amended; PD-186 and 188; until revoked.

Butyl alcohol—M-30, amended; until revoked.

Calcium-silicon—M-20a, revised and extended; PD-72; May 31, 1942.

Chlorine—M-19, amended (direct allocation after February 1, 1942); PD-190 and 191; until revoked.

Chlorinated hydrocarbon refrigerants—M-28; PD-162; December 31, 1942.

Chlorinated hydrocarbon solvents—M-41; PD-127; until revoked.

Chlorinated rubber—M-46; July 31, 1942.

Chromium—M-18a; PD-54 and 55; April 30, 1942.

Cobalt—M-39 and 39a; PD-152 and 153; March 31, 1942.

Copper—M-9a, b, and c; PD-130; June 30, 1942.

Ethyl alcohol—M-30, amended and M-69; until revoked.

Fats and oils—M-71; until revoked.

Formaldehyde—M-25, amended; until revoked.

Hexamethylenetetramine — M-25, amended; until revoked.

Iridium—M-49; November 30, 1942.

Isopropyl alcohol—M-30 amended; until revoked.

Lead—M-38, 38a, and 38b; PD-66, 66a, and 124; March 31, 1942.

Magnesium—M-2b; April 30, 1942.

Methanol — M-31, amended; July 31, 1942.

Molasses—M-54; until revoked.

Neoprene—M-13, amended; PD-7, 33, and 36; until revoked.

Nickel, primary—M-6a; PD-27; March 31, 1942.

Paraformaldehyde — M-25, amended; December 31, 1941.

Phenol—M-27, amended; PD-1, 178a and b, and 180; July 31, 1942.

Phosphorus oxychloride—M-35; December 31, 1941.

Polyvinyl chloride — M-10, amended; PD-7, 33, and 36, indefinite.

Potassium perchlorate—M-32; November 30, 1941.

Potassium permanganate—M-33; November 30, 1941.

Sperm oil—M-40; until revoked.

Synthetic resins—M-25, amended; until revoked.

Synthetic rubber—M-13, amended; until revoked.

Titanium pigments—M-44, amended; PD-145 and 146; until revoked.

Toluene—M-34; PD-1; December 31, 1941 (direct allocation after February 1, 1942).

Tricresyl phosphate—M-16; December 31, 1941.

Tung oil—M-67; February 15, 1942.

Tungsten—M-29; PD-9; until revoked.

Vanadium—M-23a; complete allocation; until revoked.

Zinc—M-11, amended, M-11a, b, c, d, and e; PD-20, 50a, 62, and 94; March 31, 1942.

'L' Orders

"L" orders in the scheme of priorities are designed to set limits on production or use of the materials or articles covered. Among the materials to which such orders have been applied are the following (dates are expirations):—

Cellophane (limit use)—L-20; until revoked.

Chlorine (restrict use in pulp, paper, and paperboard)—L-11; indefinite.

Leadfoil (limit production, also use for certain purposes)—L-25, amended; until revoked.

Motor fuel (limit distribution on Atlantic seaboard)—L-8; amended; October 24, 1941.

Tinfoil (limit production, also use for certain purposes)—L-25, amended; until revoked.

Efforts to Keep Prices Down

During 1941 the price situation has grown increasingly serious. In spite of repeated warnings by President Roosevelt, Secretary of the Treasury Morgenthau, Price Administrator Leon Henderson, and many others, both within and without the Federal service, Congress, which has had price-control legislation before it for considerably over six months, has failed to act on any of the many proposals.

The house, after months of hearings, arguments, and bickering, finally did approve a so-called price-control bill. However, it is generally agreed that the measure passed by the house would be considerably worse than no legislation at all. A senate subcommittee has drafted amendments to this measure and will present them to the senate banking and currency committee as this is being printed. Still, the fact remains that prices have risen unreasonably in many commodities despite the issuance by Mr. Henderson of makeshift price ceilings, with no direct statutory authority behind them.

When the year began, Mr. Henderson had served some seven months as price stabilization commissioner for the old National Defense Advisory Commission. This was all changed April 11, when President Roosevelt, by executive order, established the Office of Price Administration and Civilian Supply and appointed Mr. Henderson as administrator. As Price Stabilization Commissioner, under the NDAC, Mr. Henderson's duties were merely advisory. He was instructed to watch prices, to advise the President, to talk to the leaders of American industry, and to get their individual consent, as far as possible, to a restraint on prices.

Conversations Inadequate

At his first press conference, the day after OPACS was set up, Mr. Henderson stated that it had become evident that something more substantial than conversations would be needed to prevent inflationary prices. He warned, at that time, that he would employ economic sanctions, if necessary, to prevent increases in the prices of basic commodities, and would rely, to a large extent, upon the withholding of supplies from non-cooperative industries.

At that time, Mr. Henderson said that the products which would receive first attention would be chemicals, paper, drugs, steel, coal, textiles, nonferrous metals, building supplies, machinery and equipment, and leather and hides. Since then, price ceilings have been established in all these industries.

The executive order establishing OPACS, considerably strengthened the powers granted the Price Administrator, giving him a long list of new duties, including the power to prevent price-spiraling, profiteering, inflation, hoarding, and speculation; to plan for civilian distribution of materials not needed for defense; to determine maximum prices, commissions, margins, and other elements of cost of commodities; to establish standards for consumers' goods; to stimulate the use of substitutes; and to advise the President on the use of his power to confiscate factories under the selective service act.

Prior to the establishment of OPACS, five price schedules were issued by Mr. Henderson, covering second-hand machine tools, aluminum scrap and secondary aluminum ingot, zinc scrap and secondary slab zinc, iron and steel scrap, and bituminous coal (later revoked). Since that time, fifty-eight additional price schedules have been issued, covering a variety of commodities, including a number of chemicals and drug materials.

In an executive order issued August 28, by the President, the Supply Priorities and Allocations Board was

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• • • *for the scientific achievement of tomorrow*

• • • *and guided by the successes or failures of yesterday*

• • • *the Merck Research Chemist is constantly striving to develop new chemotherapeutic products, and to improve the efficacy of those now in use.*

In a never-ending battle against disease, this man carries on his intricate and delicate experiments in yet another world apart — an amazing world of test tubes, microscopes, retorts, and other laboratory apparatus, located only a few feet from the highways of everyday business and pleasure.

The research chemist diligently studies new means of combatting disease—hoping, testing, rejecting, perhaps a thousand times before success is achieved. Wrestling with nature, he also extracts from her the secrets of the vitamins, hormones, enzymes, and other substances which are so important in the fields of medicine and nutrition.

Slowly, steadily, research has gained ground against the ravages of disease. Much has been done, but much remains to be accomplished. And only by constant application can true progress be made so that the scientific dreams of the present may become the beneficial realities of the future.

In the endless battle to achieve that goal, Merck research chemists will continue to recognize their heritage of responsibility.

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established. At the same time a Civilian Supply Divison was set up in OPM, taking over all duties in connection with civilian supply matters from OPACS, the name of which was changed to the Office of Price Administration. Mr. Henderson remained as head of both agencies.

December 19, in the final reorganization of defense agencies of the year, an administrative order was issued by William S. Knudsen and Sidney Hillman as Director General and Associate Director General, respectively, of OPM, stripping Mr. Henderson of all administrative authority with respect to civilian allocation functions and making the OPM Division of Civilian Supply merely a "thinking and planning" outfit.

Following the passage of the house version of the price control bill November 28, the senate subcommittee ordered hearings on the measure for December 9, and, after amending the bill to include most of the provisions desired by the administration and adding a few provisions for bargaining purposes when the measures reaches the conference committee after its adoption by the senate, voted to report the bill to the full committee. It is expected that this legislation will be the first undertaken by the new senate, which meets beginning January 5.

Price Ceilings

The Office of Price Administration has issued between sixty and seventy orders laying price ceilings on a variety of articles suspected of inflationary influences. Among the articles affected are the following materials and products in the general category of chemicals, oils, and drugs, and nonferrous metals and containers of interest to the industries concerned with such materials (the dates are those when the latest revisions become effective):—

Acetic acid—Schedule No. 31; January 2, 1942.

Acetone—Schedule No. 36; January 1, 1942.

Aluminum scrap and secondary aluminum—Schedule No. 2; October 31, 1941.

Asphalt or tarred roofing—Schedule No. 45; December 12, 1941 (amended January 5, 1942).

Bags, second-hand—Schedule No. 55; December 6, 1941.

Burlap—Schedule No. 18; August 15, 1941.

Butyl alcohol—Schedule No. 37; January 1, 1942.

Cocoa butter—Schedule No. 51; December 11, 1941.

Copper—Schedule No. 15; August 29, 1941.

Copper alloys (brass mill scrap)—Schedule No. 12; October 2, 1941.

Copper scrap—Schedule No. 20; October 17, 1941.

Ethyl alcohol—Schedule No. 28; January 1, 1942.

Fats and oils and products thereof—Schedule No. 25 (limitation of forward sales); September 11, 1941; schedule No. 53 (price ceilings); January 2, 1942.

Formaldehyde—Schedule No. 21; August 20, 1941.

Glycerin—Schedule No. 38; December 18, 1941.

Methanol, natural—Schedule No. 34; October 3, 1941.

Nickel scrap and secondary materials containing nickel—Schedule No. 8; September 6, 1941.

Paraffin—Schedule No. 42; November 21, 1941.

Pepper, black and white—Schedule No. 52; December 11, 1941.

Petroleum, Pennsylvania crude—Schedule No. 22; August 22, 1941.

Steel barrels and drums, void—Schedule No. 43; November 24, 1941.

Tin, pig—Schedule No. 17; September 19, 1941.

Zinc scrap materials and secondary slab zinc—Schedule No. 3; October 17, 1941.

Ceiling prices fixed by OPA and those set by agreements are fully listed every week in the Prices Current section of OIL, PAINT AND DRUG REPORTER.

Price Agreements

In addition to mandatory price ceilings, the Office of Price Administration also places limits on prices of materials through agreements on the part of producers. Among the materials thus controlled in price are:—

Beeswax
Benzol
Bleaching powder
Cadmium metal
Candelilla wax
Carnauba wax
Carbon black
Coaltar solvent naphtha
Dry colors
Natural resins (varnish gums)
Ouricury wax
Shellac
Sodium pyrophosphates
Sulphuric acid
Titanium pigments
Toluol
Xylol
Zinc oxide

Taxes Big and Growing

The close of 1941 found the United States faced with the greatest tax burden in the nation's history—to date. The tax program to be presented to Congress early this month by Secretary of the Treasury Morgenthau, however, will make the 1941 tax bill appear mild.

Estimates on the amount of money which the Treasury Department will request for the coming year range as high as $20,000,000,000 in addition to levies imposed by the tax bill of 1941.

President Roosevelt has warned the country that about half the national income during 1942, or approximately $50,000,000,000, will have to be spent on our all-out war effort during the year. To obtain this stupendous amount of money it will be necessary to borrow huge sums from the American public through sales of regular government bonds, defense bonds and stamps—and taxes—taxes—taxes.

Present taxes will have to be increased sharply. New taxes of both the excise and income variety will have to be imposed. A general sales tax, which was strongly opposed by the administration last year during the defense program era, will probably be equally as strongly supported this year since the transition to a full state of war. Withholding taxes are being repeatedly suggested, in order to assure easier collections by the government. A withholding payroll tax of up to 15 percent is not unlikely, and is one of Mr. Morgenthau's favorite plans.

Hunting New Sources

Excise taxes of all kinds are sure to be doubled or tripled. Luxury taxes will certainly be increased sharply. Nearly every possible tax source will be explored to discover its possibilities before the year is out.

To get some idea of what may be done by the government in 1942 to aid in financing the war through internal revenue collections, it might be well to review the provisions of the 1942 revenue act.

In April, the Treasury Department, following a conference with congressional leaders, proposed a $3,500,000,000 additional tax program. This was designed to place government spending for the year on a two-thirds pay-as-you-go basis, Federal expenditures at that time being estimated at about $19,000,000,000, and revenue collections from taxes already on the books estimated at about $9,000,000,000.

The measure became law in mid-September, after being completely rewritten by the house, again by the senate, and a third time in the conference committee of the two houses. As enacted, it was estimated that it would actually yield about the amount requested by the Treasury Department originally.

However, many of the original provisions of the bill had been eliminated and new ones added during the months that Congress had it under consideration. Alcohol taxes were raised from $3 to $4 per proof-gallon, and the $4 tax was made applicable to brandy as well. All efforts to exclude from this provision taxes paid on distilled spirits in the case of spirits used in the manufacture or production of an article to be used for nonbeverage purposes and sold for such use were finally defeated after strong protestations on the part of the Treasury Department.

Proposals to levy a soft-drink tax were eliminated from the final bill, as was a proposed increase of one cent per gallon in the Federal tax on gasoline. Exemptions from excess profits taxes income derived from mining strategic materials, which were in effect at the time, were repealed by the bill. A tax of 2 cents per thousand was imposed on the sale of ordinary matches, while "fancy" wooden matches were taxed 5½ cents per thousand.

Retail Cosmetic Tax

A retail sales tax of 10 percent was levied on all toilet preparations and cosmetics, including perfumes, essences, extracts, toilet waters, petroleum jellies, hair oils, pomades, hair dressings and restoratives, hair dyes, aromatic cachous, toilet powders and any other preparations used or applied for toilet purposes. All excise taxes became effective October 1.

Taxes on radio time sales and billboards, included in the house bill, were eliminated in the final measure. However, a levy of 10 percent was included on charges for telephone or radio telephone messages or conversations for which the charge is more than 24 cents. Leased wire, teletypewriter, or talking circuit special services, were taxed at a rate of 10 percent, and a 5 percent levy was imposed on wire and equipment service and burglar and firealarm service. Local telephone service was taxed at a rate of 6 percent.

Electric, gas, or oil appliances used for cooking or heating are taxed at a rate of 10 percent, and all washing machines, both commercial and domestic, received a 10 percent tax, and electric light bulbs were taxed at a rate of 5 percent.

Individual income taxes, under the new legislation, were substantially increased, and exemptions lowered. In addition to the normal rate of 4 percent on incomes, surtaxes ranging from 6 percent on the lower brackets to 77 percent on incomes of $5,000,000 or more were added by the bill.

In the house bill, it was proposed that a special levy of 10 percent be added on increased earnings of corporations which might otherwise escape the excess profits tax through the use of the invested capital basis for computing surtax income. This was eliminated in the final draft and a provision substituted increasing corporation surtax rates from 5 percent to 6 percent on companies earning $25,000 or less; and from 6 percent to 7 percent on companies earning in excess of $25,000.

All these taxes will most probably be increased sharply in the 1942 revenue bill, and it is certain that many new taxes will be added. Levies which were proposed in the 1941 measure but eliminated before final passage are also pretty sure to be brushed off and inserted in the next tax bill.

Antitrust Law Litigation

The national emergency put a crimp in some of the activities of the Antitrust Division of the Department of Justice as revitalized during the two preceding years by Assistant Attorney-General Thurman Arnold, but for the most part the campaign against alleged monopolies, combinations, and restraints of trade continued with only a shift in emphasis.

Early in the year it became apparent that the national defense program would require the concerted action of competitors within various industries in working out plans for conserving raw materials, limiting the number of types and models produced, pooling contracts, restricting output and distribution, adhering to price schedules, and in other ways refraining from full and open competition in order to comply with requests of defense agencies. Because businessmen knew full well that agreements, even when done at the request of a government agency, constituted at least technical violations of the Sherman antitrust act, the Attorney-General, then Robert H. Jackson, April 29, 1941, wrote a letter to John Lord O'Brian, general counsel of the Office of Production Management, outlining the procedure to be followed by OPM in obtaining concerted action of competitors and promising immunity from antitrust prosecution for acts taken in accordance with OPM programs.

In brief, this letter stipulated that committees of industry might discuss and recommend, but that all plans for concerted action were to originate with OPM and be directed to the industry in writing after the general character of the plan had been approved by the Department of Justice. After that the department would bring no prosecutions for actions done in strict compliance with such a directive or program, but the department reserved the right to bring civil injunction actions against practices found not to be in the public interest and persisted in after notice to desist. This was followed by letters in similar vein covering the activities of the Office of Price Administration, Office of Petroleum Coordinator, and the small business contract pooling and product simplification and standardization activities of OPM.

Litigation Plentiful

In spite of this voluntary limitation of its field of action, the Antitrust Division remained very active throughout the year, working on cases already pending and making new investigations against practices said to interfere with the defense effort or having no immediate relation to defense. In particular, the division made a drive against patent pooling and other agreements between American and foreign, chiefly German, concerns which were alleged to restrict prices or production of strategic materials in this country or to divide up spheres of world distribution.

Typical of such actions was the grand jury indictment brought in New York January 30 against six firms engaged in the magnesium industry, charging an international agreement to restrict production and trade.

April 10 the department announced a sweeping investigation of German relationships with American chemical, pharmaceutical, and other corporations, and a Federal grand jury in Newark, N. J., subpoenaed the records of a number of such firms. As a part of this general investigation, a complaint and consent decree were filed in New York September 5 involving Stirling Products, Inc., its subsidiaries, Winthrop Chemical Company and Bayer Company, Inc., and the Alba Pharmaceutical Company, and certain officers, ending illegal agreements with German concerns, including division of South American markets, profit-sharing, and use of patents and trademarks.

December 17 the department announced that the Federal court in Newark had assessed fines on four drug manufacturing companies and their major executives on charges of antitrust violations in cartel actions chiefly concerned with the manufacture and distribution of hormones. The corporations, which plead nolo contendere to charges of illegal foreign tie-ups, were Schering Corporation, Ciba Pharmaceutical Products, Inc., Organon, Inc., and Rare Chemicals, Inc. Two days later a federal grand jury in New York brought an indictment against the General Aniline & Film Corporation, and General Dyestuffs Corporation, charging illegal agreement with the German I. G. Farbenindustrie to restrain production competition, and exports.

Drug Distribution Probed

In its domestic distribution activities, the drug industry was under continuous anti-trust investigation throughout the year. As the year opened, a Federal grand jury in the District of Columbia was studying a huge volume of documents pertaining to wholesale and retail distribution of drugs, pharmaceuticals, surgical supplies, toilet goods, and related merchandise, and evidence so collected was used by the Department of Justice as the starting point for several other investigations. During January a grand jury in Philadelphia, Pa., subpoenaed additional records involving surgical instrument sales, which led to a decree eliminating price-fixing.

A second Federal grand jury in Newark, N. J., has had under scrutiny for almost a year the legality of more or less coercive activities alleged to prevail in the drug and related and certain other trades in connection with so-called "fair trade" laws. Much secrecy surrounds this investigation; but,

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Butyl Alcohol	Toluol
Formaldehyde	Xylol
Turpentine	High Flash Naphthas
Rosin	Aromatic Petroleum Solvents

because of the stated antipathy of the antitrust division toward State fair-trade laws and the Tydings - Miller Federal enabling act, a common belief is that the objective is the termination of such forms of price-maintenance. But, suspicion of pressure beyond the law is more likely the motive.

Another grand jury in the District of Columbia began an investigation of insulin distribution in February, which resulted, July 2, in pleas of nolo contendere on the part of the three licensed manufacturers of insulin in the United States, Eli Lilly & Co., Sharp & Dohme, Inc., and E. R. Squibb & Sons, to charges of fixing and maintaining uniform prices in interstate commerce.

The investigation of the drug trade continued in various cities, but the surgical instrument and the insulin cases were the only specific results.

A.M.A. Convicted

An antitrust action against the American Medical Association was concluded during the year. Together with the District of Columbia Medical Society, the A. M. A. was found guilty of violating the antitrust laws in conspiring to restrain the activities of Group Health Association, a cooperative medical care plan for government employees.

A general investigation of the fertilizer and fertilizer materials industry, which had been in progress for some time, resulted in an indictment of the two major trade associations and sixty-four corporations producing and distributing mixed fertilizer in the Federal court in Winston-Salem, N. C., February 10. The indictment charged a long-standing conspiracy to fix uniform prices and suppress competition. The case was still pending at the end of the year. Another section of this general investigation ended May 29 with a consent decree in the Federal court in New York by which principal distributors of nitrogen fertilizer materials agreed to refrain from fixing prices and conditions of sale.

What was termed the longest antitrust trial in history ended October 9 when a Federal court in New York dismissed the case against the Aluminum Company of America, which the government had charged with many instances of monopolization, conspiracy, and general misconduct in connection with the production of bauxite and the manufacture and sale of various types of aluminum products.

The exigencies of national defense probably saved the oil industry from further antitrust prosecution during 1941. Pending at the beginning of the year was an over-all suit against the American Petroleum Institute and twenty-two major companies charging innumerable restraints of trade in producing, refining, transporting, and marketing petroleum and its products, and asking the court for injunctive relief in such general terms as to threaten the breaking up of integrated companies. Dates for filing answers were postponed from time to time throughout the year, and while negotiations for a consent decree settlement were conducted, the Department agreed in December to put the case off indefinitely because of the war. A companion case pending throughout 1941 charged pipelines owned by major companies with violating the Elkins transportation act in giving rebates on pipeline charges in the form of dividends of stock to owner-users. In December this was terminated by a decree in which all important interstate petroleum and gasoline pipelines in the country were enjoined from paying dividends to owner-users of more than 7 per cent on valuation. Meanwhile the oil industry was guaranteed immunity for cooperative acts taken for defense through a system of clearing with the Department of Justice recommendations and directives issued to the industry by the Office of Petroleum Coordinator.

Federal Trade Commission Work

The Federal Trade Commission submitted to Congress, January 9, its twenty-seventh annual report covering activities during the fiscal year 1940-41.

The commission renewed its recommendation previously made, that Congress amend the corporate stock acquisition provision (section 7) of the Clayton act so that the acquisition of corporate assets should be declared unlawful under the same conditions that acquisition of corporate stock has been unlawful ever since 1914.

National defense activities of the commission include investigations of house furniture prices at the request of the Office of Price Administration; investigation of bread and bakery product prices; investigation of priorities orders in the steel industry as requested by the Office of Production Management; and collection and auditing of quarterly and annual reports for a large number of corporations at the request of the Office of Price Administration and other agencies.

The chairman of the commission serves in connection with governmental committees having to do with national defense activities and members of the commission's staff have assisted other agencies and congressional committees in defense work. The chairman is the commission's representative in connection with the Economic Defense Board established by the President for developing plans and policies to protect the country's international economic relations, and is a member of the Petroleum Coordinator's committee for development and utilization of petroleum resources and facilities; of the price administration committee of the Office of Price Administration; and of the Bureau of Industrial Conservation of the Office of Production Management which is carrying on an intensive "War Against Waste."

Investigations Current

Current general investigations of the commission taken up its report are (1) corporation reports, a compilation of financial statistics of seventy-six industry groups comprising the combined operations of 780 corporations having total sales aggregating $24,932,624,668; (2) distribution cost accounting, concerning which the commission published "Case Studies in Distribution Cost, Accounting for Manufacturing and Wholesaling (house document No. 287, Seventy-first Congress, first session); (3) distribution methods and costs; (4) resale price-maintenance; (5) furniture prices, costs and profits, mentioned above in connection with national defense activities; and (6) mass food distributors.

Passage of the wool products labeling act of 1939 early in the fiscal year, the commission reports, marked a new development in the field of consumer protection and promotion of fair competitive practice. The commission is empowered to enforce this statute designed "to protect producers, manufacturers, distributors, and consumers from the unrevealed presence of substitutes and mixtures in spun, woven, knitted, felted, or otherwise manufactured wool products, and for other purposes." The commission issued rules and regulations and began the administration and enforcement of the act.

Under legal activities, the report shows favorable results in forty out of the forty-two commission cases reaching the Federal courts during the fiscal year.

The commission, after preliminary investigation, disposed of approximately 1,850 legal matters which were in a preliminary stage; issued 357 complaints in formal proceedings against companies, associations or individuals, alleging various forms of unfair competition or unfair, deceptive or other unlawful acts or practices, compared with 331 complaints in the last preceding fiscal year; accepted 532 stipulations to cease and desist from various practices from parties against whom informal proceedings had been instituted; and entered 348 orders to cease and desist from unlawful practices, which had been previously alleged in complaints, compared with 282 such orders issued during the last preceding fiscal year.

Further commission activities reported are the promulgation of trade practice conference rules for half a dozen important industries; the review of some 377,800 newspaper, magazine, and other periodical advertisements and more than 871,900 commercial radio broadcast continuities for possible misleading advertising matter; and the receipt of export trade papers from forty-five associations operating under the export trade (Webb-Pomerene) act, whose exports in 1940 totaled more than $307,350,000, which was about $70,000,000 more than in 1939.

Commission Recommendations

In recommending again the amendment of section 7 of the Clayton act to make unlawful the acquisition of corporate assets under the same conditions that acquisition of corporate stock has been unlawful ever since enactment of the law, the commission calls attention to the Temporary National Economic Committee's endorsement of its recommendation and also to that committee's conclusion that the process of corporate merger and consolidation "has contributed in major part toward the elimination of competition" and that the failure to prohibit acquisition of corporate assets affords "a convenient way of circumventing the obvious intention of the law."

The commission refers to the TNEC proposal that acquisition of assets of competing corporations over a certain size be forbidden without prior governmental approval to insure that the purpose and probable result of such acquisition would be in the public interest, and that the burden of demonstrating such a purpose and result should be upon the proponents of the merger. The commission reports that it is strongly in accord with the principle of thus limiting future expansion of the evil.

Corporation Reports

The purpose of this project is to collect and compile in combined statements, by industries, for publication, information regarding business conditions and financial results obtained periodically from representative corporations in each of a large number of important industries. The commission believes that the published summaries will be of increased value to the government in showing the trends of industrial activity, as well as to managers of corporations, stockholders, lenders of capital, and the general public. The $24,932,624,668 total aggregate sales of the 780 corporations whose operations were reported represents almost 64 percent of the total value of product as reported by the United States Bureau of Census.

Distribution Cost Accounting

The commission's report on "Case Studies in Distribution Cost Accounting for Manufacturing and Wholesaling" points out that both business and the government are interested in sound methods of ascertaining distribution costs: business, because of the aid such methods give in the proper conduct of its operations; government, because of its responsibility in administering laws such as the State and Federal anti-discrimination acts. The commission points out that distribution cost accounting is a newly developing field which becomes increasingly important as the part played by the distributing function in the nation's total economy becomes more significant.

Distribution Methods and Costs

This study of distribution problems was undertaken to develop information respecting the methods and practices used and the costs incurred in distribution by manufacturers, wholesalers, and retailers of numerous types of commodities. Special attention is being given to trade usages, practices, charges, laws, and barriers to trade that affect distribution costs. The inquiry is in progress.

Resale Price-Maintenance

The inquiry has to do with the effects of resale price-maintenance on the interests of manufacturers, wholesalers, retailers, and consumers of price-maintained and competing non-price-maintained articles. A report on the inquiry is in course of preparation.

Mass Food Distributors

This investigation, now in progress, has as its purpose a comparison of (1) the savings in costs of selling and delivering certain foods in large quantities, particularly when delivered to the buyer's warehouse, and (2) the concessions in price made to the buyer on such sales.

General Legal Work

The 357 formal complaints charging unlawful practices included 11 cases of alleged combination to fix and maintain prices, six cases of alleged combination and conspiracy in restraint of trade, 219 complaints charging misleading representation in advertisements, labels and otherwise, and fifty-seven complaints alleging price discrimination in violation of the Clayton act as amended by the Robinson-Patman act. The 348 orders to cease and desist pertained to violations of the Federal Trade Commission and Robinson-Patman acts. Of the 532 stipulations accepted, 234 related especially to representations in radio and periodical advertising matter.

Of the forty-two commission cases reaching the Federal courts, forty were decided favorably to the commission. Two of the forty favorable decisions were handed down by the Supreme Court of the United States and twenty-six by United States Circuit Courts of Appeals in cases in which review of commission orders to cease and desist had been requested. Petitions by respondents for review of commission orders in seven cases were dismissed by the circuit courts of appeals. Twelve of the cases decided in the commission's favor were injunctive matters before the United States District Courts. As to the two cases decided adversely to the commission, a commission order was set aside in one case in a circuit court of appeals, and the supreme court in another case affirmed a decision of a circuit court of appeals reversing a commission order.

The United States Circuit Courts of Appeals for the fifth time upheld the commission in prohibiting the payment or receipt of brokerage fees or commissions in violation of the brokerage provision of the Robinson-Patman act and fined another company for violating the court's decree enforcing a similar order of the commission.

In two proceedings concerning so-called "style piracy" in women's apparel the commission's orders were affirmed by the supreme court. In a commission case against a Chicago candy company the supreme court, by a 5-to-3 decision, set aside the commission's order prohibiting the intrastate sale of lottery assortments of candy which injuriously affect interstate commerce.

The commission certified the facts concerning nine alleged violations of cease and desist orders to the Attorney-General. At the close of the fiscal year the government had collected, or was collecting, $12,290 in civil penalties from ten defendants whose cases had been determined during the fiscal year, their cases having been certified by the commission previously.

The twelve injunctive proceedings mentioned above were instituted to stop the false advertisement of certain products alleged to be detrimental to public welfare, pending issuance of the commission's complaints and their final disposition. All the injunctions sought were granted. The products involved in the cases were either medicinal preparations—mostly emmenagogs—or devices alleged to be dangerous to health.

Trade Practice Rules

Trade practice conference rules were promulgated during the fiscal year for industries with an aggregate annual sales volume of approximately one billion dollars, and with thousands of manufacturing and marketing units, including the resistance welder manufacturing industry, tuna industry, subscription and mail-order book publishing industry, linen industry, hosiery industry, and beauty and barber equipment and supplies industry.

Export trade associations operating under the Webb-Pomerene act, administered by the commission, report that experience during the last year emphasized the advantages to be gained by group action in export trade. As a central organization, the "Webb law" association was enabled to keep abreast of the situation resulting from swiftly moving events in the war areas, and to carry on the increasingly complicated business of accepting orders, allocating them among its members, and giving other valuable assistance in the effort to ship goods abroad.

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Drug Control Tightened

Administration of the food, drug, and cosmetic act was largely routine during 1941, as most of the major problems in connection with this relatively new law had already become rather well understood by the trades, and the rulings of the Food and Drug Administration were overshadowed by war developments, priorities, and material shortages. Nevertheless, the activities of FDA continued along established lines and a number of quite important actions were taken during the year.

Early in January the FDA published proposed amendments to its regulations regarding drug labeling and applications for new drugs. It proposed to tighten the label regulations so as to prevent over-the-counter sale of drug preparations labeled for prescription use by exempting a drug from the requirement that it bear directions for use only if labeled to show that it was exclusively for prescription use, without any wording to suggest its use other than on a prescription, and only if distributed exclusively for prescription use. The regulations on new drugs liberalized experimental use to some extent but tightened restrictions on label regulations in such cases. After hearings, both these amendments were promulgated and became effective May 10.

The campaign against self-medication with drugs designed for use only by physicians or on prescription was carried on intensively by FDA throughout the year. Early in January it published a letter sent to representative manufacturers listing a large number of drugs which it considered unsafe for unsupervised use, either in any quantities or in excess or specified doses. Manufacturers were told that such drugs must be sold for prescription use only and that any efforts to induce general distribution or over-the-counter sales would be considered a violation of the law.

Retailing Under Scrutiny

Since "prescription-legend" products are exempt from the general requirement that drugs bear adequate directions for use, FDA adopted the policy that this exemption would expire whenever a sale was made other than on a prescription, thus rendering the drug misbranded and in violation of the law. To carry out this campaign, FDA, with the cooperation of State health authorities, conducted an intensive campaign of investigating retail drug stores. In many cases the agents were able to purchase "prescription-legend" goods without a prescription, and approximately a hundred druggists in various parts of the country were cited during the Spring to show cause why criminal proceedings should not be brought against them for violation of the food, drug and cosmetic act. These actions were largely successful in bringing about the desired results without actual prosecution, but FDA continued to consider this one of its major projects during the year.

Another important project was a campaign to review the labels of preparations for colds. All manufacturers were sent notices reminding them that such preparations must be labeled to reveal any facts which are material in the light of such affirmative representations as the label may make, including statements indicating the effects of the medicine with respect to the ailment and its limitations in medication. The survey of cold preparations was continued through the year as a routine matter with widespread, though not spectacular, results.

Trademarks as Common Names

An action which upset the drug trade more than anything else was a proposal which threatened, in the view of the trade, to destroy the value of private trademarks for certain types of drugs. January 30, FDA published proposed regulations designating certain drugs as habit-forming derivatives of those drugs designated in the act as definitely habit-forming. At the hearing March 3 there was no objection to the drugs listed nor to the proposed label requirements, but spokesmen for the industry raised violent opposition to the wording of the regulation which designated common names for these habit-forming drugs and required all manufacturers to place these names on their labels. In a great many cases the words listed as common names were in fact registered trademarks and the property of individual manufacturers.

Trade representatives insisted that promulgation of the regulations in this form would permit competing manufacturers to capitalize on their trademarks, though FDA officials insisted that trademark monopoly rights were strengthened by the proposal. The argument raged during the Summer as briefs and exceptions were filed and conferences were held. When the regulations were finally promulgated, November 15 they contained no designations of common names as such, though trademarks were listed along with the chemical names of the drugs. This action was viewed by the trade as carrying out its desires, and the threat to the trademark system was considerd to have passed.

Manufacturing Control

Two serious dangers to public health received prompt action from FDA early in April. The more serious of these involved a manufacturing error on the part of the Winthrop Chemical Company through which sulphathiazole tablets became contaminated with lethal doses of phenobarbital. The adulterated drug was said to have been responsible for several deaths. FDA inspectors threw out a country-wide dragnet to remove from the market all tablets shipped by that company. By means of batch numbers used by the company virtually all of the contaminated drugs were rounded up soon after the mistake became known. It so happened that sulphathiazole was being distributed under a "new drugs" application, and FDA immediately revoked the effectiveness of the Winthrop company's application on the ground that it had not exercised sufficient supervisory control.

The other public health danger involved a hair waving preparation used by beauty parlors under the name of "Willet Method." This preparation contained ammonium sulphide in an amount which FDA declared was sufficient to be dangerous to health when used as directed, and the product was said to have been responsible for the death of one woman in a beauty shop in Atlanta. FDA inspectors immediately seized all of this preparation on the market and effectively stopped its further distribution.

Another unusual incident in the enforcement of the food, drug, and cosmetic act was the indictment September 24 in the Federal court for the District of Columbia of Theo Clements, New York, for fraud in filing an application to distribute a new drug. The government charged that Clements had been employed to ascertain whether or not a new skin medicine was harmless and that he altered an affidavit of a pathologist by eliminating findings that the preparation might injure the skin and substituting his own statement to the effect that it would not cause harm. This was the first action of this kind taken under the law.

Oleomargarin Fight

The wrath of the dairy industry was vented upon FDA because it promulgated a standard of identity for oleomargarin which raised the standard of this product to such a level that the dairy interests charged it would offer severe competition to butter. Ironically, representatives of the dairy industry sat throughout the hearing without making a protest and did not become alarmed until margarin manufacturers began to brag about the improved quality of their product. Dairymen then protested to Congress and brought much pressure on the Federal Security Agency to have the standard revoked, but this was not done, partly for the reason that, even if there were no standard, margarin manufacturers proposed to continue the new and improved methods of manufacture. Request for a rehearing was formally denied in November.

The only important personnel change in the headquarters staff of FDA was in the chief of the Drug Division. Dr. J. J. Durrett, who held that post for some time, became a principal technical advisor to the Food and Drug Commissioner, and in February he resigned the post to head the medical staff of the Federal Trade Commission in its work in connection with advertising of foods, drugs, and cosmetics. The Drug Division was then headed by Dr. Theodore Klumpp until he resigned to take a position with the American Medical Association in Chicago. In December Dr. Robert P. Herwick was appointed head of the Drug Division. He had served on the staff of this division since 1938.

One amendment to the food, drug, and cosmetic act was enacted during the year, a special law to give FDA authority to control the quality of insulin by prohibiting the sale of insulin except from certified batches. This law was rushed through Congress in December when it became apparent that regular provisions of the act would not be sufficient to control insulin standards after the expiration of the patent December 23.

Vitamin Labeling

Label requirements for special dietary foods were promulgated as regulations November 22, to become effective six months later. They apply to all foods purporting to have special dietary uses, and also cover drug products purporting to supply some dietary deficiency, such as vitamins or minerals. In general the regulations require a statement of the proportion of the minimum daily intake of specified vitamins and minerals supplied by stated quantities of the preparation, statements of unitage and quantity, and adequate directions for use. They are dubiously regarded in some quarters of the drug trade as antagonistic to the classification and sale of vitamins as drugs.

Petroleum Industry Nationalized

In 1941 was effected the complete transformation of the petroleum industry from a (for the most part) self-regulated business to one entirely controlled by the Federal government. In spite of the fact that Secretary of the Interior Harold Ickes in mid-January took occasion to declare that he was not in favor of governmental administration of oil, but merely desired "better understanding" among the States, the Federal government, and the industry, the end of the year found Mr. Ickes in absolute control of the petroleum industry.

With the issuance in late December of general preference order M-68, by the Director of Priorities, and the simultaneous issuance by the Petroleum Coordinator's Office of "recommendations" for State-by-State oil production in January, and the announcement that this procedure will become a monthly affair, Mr. Ickes assumed full control of the industry.

The year began with the filing of an intermediate report to Congress by the special petroleum subcommittee of the house, headed by Representative William P. Cole, jr., of Maryland. In this report, Mr. Cole urged the continuance of the investigation which had been going on under his direction for several years. The request was based on the need for conservation of petroleum in the beginning of the defense effort.

Oil Pipes for Defense

After hearings late in March and in early April, the Cole committee turned down all efforts aimed at Federal control of the industry, and instead reported out a bill, which was later enacted into law, granting the right of eminent domain for the construction of pipelines required for the defense of the United States. Under the provisions of this legislation, three lines were authorized, two of which are already completed and in operation. These lines run from Port St. Joe, Fla., to Chattanooga, Tenn., and from Portland, Me., to Montreal, Quebec. In addition, the Plantation pipeline, running from Shreveport, La., to Greensboro, N. C., is under construction, and is expected to be in operation early this year.

In the Spring, the British government requested the United States to lend it a number of tankers to replace the losses of tanker tonnage due to sinkings and much longer routes taken to avoid such sinkings. Initially, twenty-five tankers were coastal run and turned over to the British. This was followed a little later by an additional twenty-five vessels, and then in groups of a few at a time until approximately one hundred tankers were transferred to British service.

The loss of this tonnage started the oil "shortage" in the Atlantic Coast States which was later to cause so much controversy and finally be the subject of a special investigation by a senate committee, headed by Senator Francis Maloney, of Connecticut.

It was at this time, the end of May, that the President by executive order, set up the Office of the Petroleum Coordinator, granting this office most of the powers which the Cole committee had refused to approve after the conclusion of the investigation. Under this executive order, making Mr. Ickes the oil czar, all other governmental agencies were instructed to aid him in enforcing decisions with respect to the industry. The scope of the powers granted were indicated in the President's letter which specifically mentioned the proper development, production, and utilization of reserves of crude oil and natural gas; elimination of cross-hauling of petroleum development and more efficient use of transportation facilities; balancing refining operations; efficiency of production and distribution; and elimination of unnecessary drilling.

Gasoline Service Curtailed

It was under this authority that Mr. Ickes ordered the closing of all gasoline service stations from 7:00 p.m. to 7:00 a.m., and instituted a campaign to cut down on the consumption of gasoline and other petroleum products when the pinch in supply resulting from the diversion of tankers to the British began to be felt.

A storm of protest followed, and Senator Maloney began his investigation of the "shortage" and of methods which had been taken by the Petroleum Coordinator and his staff to counteract the lessened supplies of petroleum products in the East coast area. After a stormy several weeks of hearings, the Mahoney committee finally reported that there was no actual shortage but merely a "shortage of surplus." It was soon after this that the British returned some forty tankers to this country, permitting adequate supplies to begin moving to the Eastern States again. However, with the outbreak of the war in the Pacific December 7, and the resultant transfer of an undisclosed number of tankers from the East coast to the West coast of the United States, the shortage bugaboo again is beginning to rear its ugly head.

Oil Prices Controlled

About the middle of the year, general price raises were beginning to make themselves felt, and there were several moves in the petroleum industry to increase the price of crude oil. These moves were immediately blocked by Price Administrator Leon Henderson. Mr. Henderson announced that he would permit no increases in the petroleum industry unless accompanied by cost data showing that a higher price was necessary because of increased labor and materials costs. Since that time reams of such data have been presented to the Price Administrator's office, but as yet, no increases have been allowed and all inquiries as to when a decision will be made on the subject have been answered with "the matter is still under study."

The major step in placing the industry under full governmental regulation came December 23, with the issuance of the M-68 order. This order prohibits the use of any equipment or machinery by oil producers who do not conform to well-spacing and other restrictions proposed by Mr. Ickes. The order was issued under the priorities act which provides for both civil and criminal prosecutions for any violations of orders issued under the act.

While Mr. Ickes' nationwide prorationing plan, issued at the same

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		Acid No.	Saponification No.	Iodine No.*	Titre °C
Capric Acid, Technical, Distilled	Base for chemical synthesis, wetting agents	300-310	302-315	3-7	3
Castor Acids, (ricinoleic acid)	Cosmetics, shampoos, synthetic resins	170-180	185-195	85-90	below 5
Chinawood Fatty Acids, Split	Driers, varnish compounds	190-195	198-202	160-W	38-44
Cocoanut Fatty Acids, Distilled	Soaps, shaving creams, shampoos, dry cleaning soaps, rubber softeners, wetting agent for pigments, alkyd resins	260-270	263-274	9-15	21-25
Cottonseed Fatty Acids, Distilled	Alkyd resins	198-202	200-204	90-110	36-39
Cotton-eed Fatty Acids, High Titre, Distilled	Base for soap greases and soaps	200-208	202-210	65-73	43-48
C. P. Soapstock, Single Distilled	Soaps	170-190	173-193	65-100	26-35
C. P. Soapstock, Double Distilled	Soaps	182-194	185-196	72-96	31-36
Distoline, Distilled	Kier assistant, soaps, metal polishes, driers, insecticides, pulp and paper manufacturing	192-196	195-198	100-120	20-24
Helioline-D, Distilled	Alkyd resins	195-197	198-200	110-120	18-22
Isoline Fatty Acids, Distilled (9-11-octadecadienoic acid-1)	Alkyd resins—non-yellowing; driers	195-200	196-203	155-165	below 0
Lauric Acid, Distilled	Chemical Syntheses, soaps	270-280	272-282	3-6	25-27
Linseedine Fatty Acids "Supra", Dist.	Lightest color alkyd resins	195-200	196-202	180-185W	17-22
Linseedine Acids, No. 1, Split	Alkyd resins	185-190	195-202	180-185W	15-21
Linseedine Acids, No. 3, Distilled	Soaps, emulsifying agents	185-190	188-193	140-150W	18-22
Marine Fatty Acids, Distilled	Soaps	193-195	196-200	127-145	20-24
Marine Fatty Acid, Split	Linoleum, oilcloth	188-190	191-196	158-170W	20-21
Marine Fatty Acids, Split, Filtered	Soaps, alkyd resins	188-190	191-196	158-170W	20-21
Myristic Acid, Distilled	Soaps, cosmetics	240-245	242-247	1-13	41-44
Oleine, White (iron free)	Textile lubrication, pharmaceuticals, dry cleaning soaps, esters, carbon papers, typewriter ribbons.	196-200	199-203	80-90	10 max.
Olivine, Distilled	Olive type soaps	196-198	198-200	85-98	22-24
Palm Fatty Acids, Single Distilled	Soaps	196-203	198-206	40-55	42-46
Palm Fatty Acids, Double Distilled	Textile finishing compounds, soaps	198-203	200-206	38-55	44-48
Palm Fatty Acids, Split	Soaps	185-195	195-203	48-56	42-46
Perilla Fatty Acids, Distilled	Alkyd resins	196-201	198-201	195-200	41-45
Rapeseed Fatty Acids, Distilled	Alkyd resins	177-180	180-183	100-110	10-15
Sardine Fatty Acids, Distilled	Alkyd resins	197-203	200-206	115-130	28-36
Soybean Fatty Acids, Distilled Other types on request.	Alkyd resins	195-201	198-207	130-135W	22-26
Sunflower Fatty Acids, Distilled	Alkyd resins	197-200	200-203	125-135	20-24
OTHER PRODUCTS					
Extreme Pressure Base	Automotive lubrication, cutting hard steels; diluted 1:20 withstands 42,000 lbs. per sq. in. pressure.	—	—	—	—
Isoline	Synthetic drying oil for lithographic inks, linoleum, paint and varnish industry	3 Max.	190-195	150-160	
Isoline S-V		3 Max.	190-195	145-150	
Isoline Z-3		5 Max.	190-195	138-145	
Linseed Pitch	Flooring compounds, black paint	85-105	145-160	65-80	
Seedine	The superior dispersing agent for carbon black in rubber compounds	Specifications submitted upon request.			
Woburn Cutting Oils	Efficient, economical sulphur base oils for ordinary metal cutting work				
Woburn No. 8 Oil	Footwear rubber softener				
Språkast	Insecticide—Contact and stomach poison for insects that infest fruits and vegetables				

*Unless otherwise indicated, the Hanus Method was used in determining iodine numbers; W indicates Wijs Method.

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time, has no legal basis itself, he can use M-68 to enforce this program by denying permission to obtain or use necessary equipment to any person who does not conform to both programs.

So, starting 1942, the oil industry is faced with full Federal regulation, despite the fact that Congress refused to pass legislation granting such authority; and a new fuel shortage is developing which, however, may be lessened by restrictions on the civilian use of automobiles, tire rationing, and other measures that are likely to be taken in the near future.

Foreign Trading Controlled

A complete system of economic warfare providing strict control over all trade relations with foreign nations was developed by the administration during the year. The basis was a law licensing the export of military supplies, which had been in partial effect some months previously. This law was administered by the War Department as a military function, operating through the Office of Export Control, and partly by the Department of State which issued export licenses under directives from the White House. A series of schedules were in effect limiting the export of various military supplies, but there was little system in the issuance of export licenses.

In January a general license system was inaugurated, under which large classes of commodities were given automatic license for export to certain countries. In March the Office of Export control began the issuance of periodic schedules plainly stating the articles subject to control. These two moves greatly simplified the system by eliminating much confusion and uncertainty and reducing the amount of red tape and paper work involved. During the following months the control was continually expanded to cover many types of articles and it became clear that the system was being extended beyond its original concept of conserving military supplies in this country and had become a definite measure of economic warfare. Supplies of all kinds were denied the Axis powers, while export licenses were granted to nations in the Western hemisphere and other democracies.

By August the articles subject to license had become so numerous and the general license system so complicated that the Office of Export Control began the publication of a monthly comprehensive export control schedule giving current information for exporters. It also set up a clearance system under which all interested government agencies were called on to give prompt review to applications for export licenses. Immediately on the outbreak of war an order was issued placing everything on the export control list, although nearly all important articles were already on it by that time, and all outstanding general licenses were cancelled and a limited number of new ones were issued to cover certain exports to our allies.

Economic Defense Scheme

In September the Office of Export Control was removed from the jurisdiction of the military and placed under the newly created Economic Defense Board, an interdepartmental agency headed by Vice-President Wallace. This board was also strengthened by transfer to it of the unit of the Department of State issuing export licenses, and later the board also had transferred to it the commercial section of the Office of Inter-American Affairs, headed by Nelson A. Rockefeller, who was made a member of the board, and the foreign trade staffs of the Tariff Commission and the Bureau of Foreign and Domestic Commerce.

The functions of the Economic Defense Board were to prevent trade with Axis countries and their nationals and particularly to keep Latin American nations supplied, as nearly as possible, with essential materials in order to lessen their dependance on the Axis, to maintain their economies, and to strengthen their relations with the United States. To this end the board set up a clearing arrangement with the Supply, Priorities and Allocations Board and with the Priorities Division of the Office of Production Management so that the needs of Latin American customers might be considered in allocating and granting priorities on materials of all sorts.

Immediately on the outbreak of war the President changed the name of this organization to the Board of Economic Warfare. Even before this it was plain that the functions were to regulate trade in such a way as to strangle the Axis and strengthen friendly nations. So far was the control of foreign trade subjected to regulation that exporting threatened to become a government monopoly, but as the year closed the board was working on a program of cooperation with importers in Latin American countries which was designed to maintain commercial relations between importers and exporters without breaking down the system of export control and allocation of materials.

Importing Supervised

Importing also was under the close direction of the government during the year, but through less direct means. With virtually all shipping under control of the Maritime Commission the government was able to determine what goods could be imported from what countries and in what quantities. In addition, through the Rubber Reserve Company, the Metals Reserve Company, and other agencies the government made direct purchases of basic commodities in foreign countries, at times contracting for the entire output of certain nations, in order to prevent any supplies being sold to the Axis.

The freezing of funds of Axis nationals also served to control imports, and considerable effect on foreign trade was exercised by loans and financing arrangements made by the Export-Import Bank. Immediately on declaration of war OPM took charge of all supplies of more than a dozen strategic commodities, ashore and afloat, making their importation and sale a complete government monopoly.

An important part of economic warfare was the control of foreign funds and other assets in the United States. The funds of occupied European nations had been frozen and placed under license during the Summer of 1940, but this system was not of widespread effect until June 14 when the President issued orders freezing the assets of all countries in continental Europe and their nationals. This was followed a month later by similar action regarding Japanese and Chinese funds. No frozen funds could be transferred or utilized in any way without a license from the Treasury Department. Axis nationals in this country were given only enough money to live on, but the citizens and the business firms of friendly nations were licensed to transact all sorts of business throughout the world as long as the government had assurance that the Axis would not benefit from these transactions. General licenses were issued to neutral nations under similar conditions. In August the Treasury Department began a comprehensive census of all foreign assets in the United States in order to be in better position to administer transactions involving them.

Blacklists and Blocked Funds

Another drastic step was taken in July when the President issued a proclaimed list of certain blocked nationals—the blacklist—naming several thousand individuals and business firms throughout Latin America that were suspected of having German or Italian connections. Americans were forbidden to trade with persons on this list, and such persons were denied export licenses and licenses to use frozen funds. The list was expanded later, and in December Japanese nationals and firms in Latin America were added to it. The operation of the blacklist greatly curtailed American import and export trade and was an important weapon in the growing system of economic warfare.

Just before war was declared the President created an Office of Alien Property Custodian in the Department of Justice, but even before that the Treasury Department began the supervision of physical as well as financial assets of foreigners in a limited way. In October it blocked an attempt of the General Dyestuffs Corporation to acquire control of the General Aniline & Film Corporation from a Swiss holding company, and later it sent agents to supervise operations of several companies owned in large part by German nationals.

Export Control

Several thousand chemicals, oils, and drugs, and preparations, forms, and conversions of these materials are specifically or categorically included among the articles which have been subjected to various forms of export control under executive orders by the President. Details have been published in the REPORTER from time to time. Full particulars may be got from the Office of Export Control, Economic Defense Board, Washington.

In addition to the materials subjected as such to export control a number are subject to presidential proclamation No. 2465, which controls exports of technical data relative to processes, syntheses, and operations for the production, manufacture, or reconstruction of articles or materials controlled under the neutrality act.

Among the materials not entitled to general license under the technical data embargo are the following:—

Acrylonitrile and its polymers and copolymers
Alkydresins
Ammonium salts and compounds
Antiknock compounds
Aviation lubricating oils
Aviation motor fuels
Benzene nitro derivatives
Blasting gelatin
Butadiene and its polymers and copolymers
Butylene and its polymers and copolymers
Carbon bisulphide
Chloroprene and its polymers and copolymers
Chloropicrin
Coaltar products used in explosives
Distillate
Dynamite
Ethyl fluid
Ethyleneglycol
Formaldehyde and its derivatives
Fuel oil
Gasoline, natural
Kerosene
Lead azide
Magnesium metal, ores, and alloys
Mercury salts and compounds
Naphthalene nitro derivatives
Nitrocellulose having a nitrogen content of less than 12 percent
Nitroglycerin
Nitromannite
Nitrostarch
Pentaerythrite
Petrolatum
Petroleum, crude
distillates
distillate gum inhibitors
gases, liquefied
greases
lubricants
motor fuels
solvents
transformer oils
Phenol
Phenols nitro derivatives
Potash chlorate, including all combinations and mixtures thereof
nitrate, including all combinations and mixtures thereof
perchlorate, including all combinations and mixtures thereof
Radium metal
paint
salts and compounds
Resins, synthetic, and gums
Rubber compounding agents
Rubberlike compounds, synthetic, fabricated and unfabricated
Strontium salts and compounds
Styrene polymers and copolymers
Tetraethyl-lead
Tricresyl phosphate
Triphenyl phosphate
Toluene and its nitro derivatives
Vinylidin chloride and its polymers and copolymers
Xylene nitro derivatives

More Tariff Bargains Made

A world at war greatly restricted the application of the administrations policy of reducing tariff barriers by reciprocal trade agreements, and the program was necessarily directed almost entirely to furthering the cause of hemispheric solidarity. The only major action completed during 1941 was the simultaneous negotiation of parallel trade agreements with the adjacent and economically similar South American nations of Argentina and Uruguay.

The question of tariffs, however, was of minor importance to most of American industry because of the general disruption of world trade and the scramble for materials of all sorts regardless of origin or cost.

The Argentine trade agreement which set the pattern for that with Uruguay, was of major interest to producers and users of such competitive agricultural products as flaxseed, grains, meats, wool and hides. Announcement of intention to negotiate the agreement was made by the Department of State May 14, and hearings opened June 23 before the Committee for Reciprocity Information. The agreement was signed October 14 and went into effect November 15. A novel feature was provision for conditional reductions in duties by both countries, with certain Argentine concessions dependent on customs revenues, and certain U. S. concessions on articles of which Argentina is not normally the principal supplier revokable after the end of the war,

Among the chief concessions made by the United States were reductions in the duties of casein, quebracho extract, glycerin, neatsfoot oil, mica, tallow, oleo oil, flaxseed, and canary seed, and bindings on the free list of dried blood, bones, quebracho wood, and tankage.

Hearings were held November 21 on a trade agreement with Iceland, which attracted little interest because it involved principally imports of fish oils, fish scrap, and fish meal.

A supplemental trade agreement was signed with Cuba in December involving a limited number of commodities, and making reductions in the duties on Cuban drugs and medicinal preparations of animal origin.

Late in December the Department of State announced that it would negotiate a trade agreement with Peru, and it also made known a general intent, without making a formal announcement, of taking early action toward a trade agreement with Mexico.

U.S. Bauxite Resources Sufficient for Six Years

A survey of the bauxite resources of the United States, made recently by the Bureau of Mines and the Geological Survey at the request of Secretary of the Interior Harold L. Ickes, revealed that the estimated reserves of this important aluminum ore will be exhausted in less than six years if foreign imports are stopped and the present rate of defense consumption is maintained.

There are roughly 18,000,000 tons of commercial bauxite reserves in this country, a report of the joint survey disclosed, of which about half can be used without further concentration for making metallic aluminum vital for defense. The other 9,000,000 tons are of a lower grade and would require treatment. In addition there is a further reserve of 11,000,000 to 14,000,000 tons of bauxite of a grade too low to recover under present commercial processes, the report stated.

Based on estimates of the Office of Production Management, national bauxite requirements for defense aluminum and other domestic needs will reach nearly 3,000,000 tons annually by July, 1942, the report disclosed. This is four times the 1940 consumption for all purposes. Thus the estimated reserves of 18,000,000 tons of first and second grade commercial bauxite would last this nation about five and a half years, allowing a 10 to 15 percent loss in mining.

A copy of the report may be obtained by writing for Report of Investigations 3598, "Bauxite Resources of the United States," by J. R. Thoenen and Ernest F. Burchard, to the Bureau of Mines, Department of the Interior, Washington.

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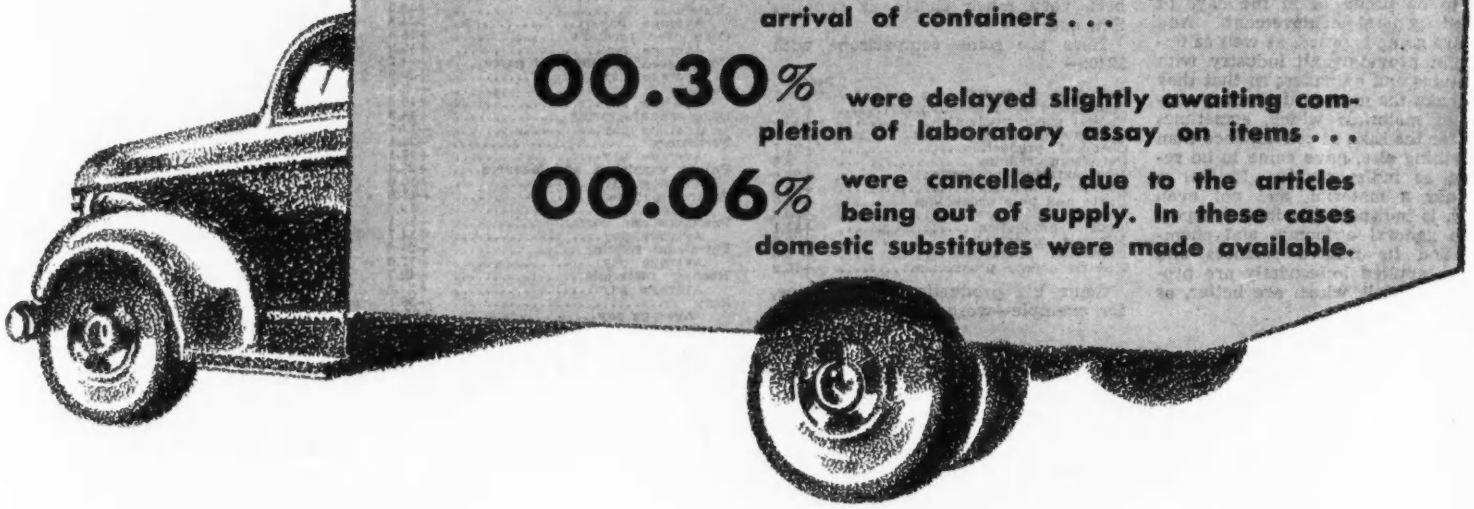
The entire resourcefulness and experience of our Company has been focused on maintaining as normal a supply of botanicals as possible, since the war disrupted usual channels of supply in September of 1939.

HOW WELL HAVE WE SUCCEEDED?

To find the answer, we segregated all orders received from wholesale drug houses on a random day recently. Wholesalers' orders were selected since, as a rule, they are the most difficult to fill complete, requiring the widest range of different botanicals and package sizes.

Here is what careful tally revealed:—


Of the total number of packages ordered
99.45% were shipped promptly . . .
00.19% were delayed slightly, due to late arrival of containers . . .
00.30% were delayed slightly awaiting completion of laboratory assay on items . . .
00.06% were cancelled, due to the articles being out of supply. In these cases domestic substitutes were made available.

After more than two years of war conditions we believe this is an excellent showing and that we have some cause for a feeling of pride in the manner in which we have taken care of our customers.

We quote the records: After all, that is what counts. What we have achieved to date we will try to equal or improve. We feel deeply the responsibility of maintaining the best record that world conditions will permit. To that end we will continue to devote all of our experience and skill.

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THE WORLD'S LARGEST BOTANICAL DRUG HOUSE

Trends of Things Through 1941

For the industries and trades of the United States, the year 1941 was a period of upgoings in almost everything—from turnovers to taxes and to troubles. Industrial production increased more than one-fourth, and that, quite naturally, pushed almost everything else up ahead of it.

The qualification, "almost," is used advisedly: there were some downgoings, and some of those were troublesome—especially that which had to do with supplies of materials required for everyday operations and some inadequacies of transportation in the same connection. Although the decline of unemployment was one downgoing which pleased, the reluctance and failure of spending for relief to follow suit had a counteracting effect, and the shrinking of the supply of skilled workers also had a hampering influence on many ideas which, along with others, had to be abandoned later as the demands for military supplies caught up with business policies which were proof against less tangible pressures in the direction of defense needs.

The chemical, oil, and drug industries, being the feeders of almost every sort of industry, from farming to flying, shared the ups, which were many, and the downs, which were bothersome. They got their share of benefits and detriments alike, and they probably fared a bit better than the average because they had it within their own hands to adjust operations more closely to the changing demands of the times. These industries did not, of course, bat 1,000, because they, too, depend quite substantially and essentially on the human element and the beneficences of nature, both of which have their shortcomings.

At that, these industries set up records to be proud of in the days of marked general achievement. And they are going forward, as well as upward, in providing all industry with substitutes and extenders so that they may make the most of dwindling supplies of materials which, sometimes more for the sake of convenience than of anything else, have come to be regarded as indispensable. Neither a man nor a material, and not even money, is indispensable in any aspect of the general economy, and chemistry and its related sciences and technics applied industrially are providing materials which are better, as well as new.

But, the best records of the trends of things are the figures which define their progress—or the reverse—so the various aspects of production, distribution, and consumption are presented numerically below.

Money Earned and Spent

The national income reached new heights—so did the public debt, which was up to 60 percent of the income at the end of the year. In comparison with 1940, here are the records; the comparisons with 1929, the year of the big boom—and bust—are significant of a new pattern (note the seventh line in the table):—

	Percent.
National income	+17.5
(Compared with 1929, +6%)	
Nonagricultural income	+19.8
Salaries and wages	+21.4
(Compared with 1929, +12.3%)	
Dividends and interest	+ 5.4
(Compared with 1929, —24.0%)	
Entreprenureal (business, rents, royalties, farming, etc.)	+14.8
(Compared with 1919, —3.0%)	
Farm marketing income	+25.9
Social security benefits and direct relief	— 2.8
Unemployment compensation	—35.0
Public debt	+21.8
General wholesale prices	+17.4
Raw and semimanufactured materials prices	+18.4
Chemicals, oils, and drugs, first-hand prices	+32.6
Cost of living	+ 8.4
Brokers' loans	— 3.6
Commercial loans	+37.1

Making More Things

Production was carried on with the safety-valve tied down; the pressure was all used up by the money at large—and statutory checks on spending were beginning to get consideration. As the months went by more and more of the pressure was turned into the war mains—and more is yet to go that way. The totals make no distinction, but it must be realized that civilian uses will not have, at best, very much choice as supplies thin out.

Here are some comparisons with 1940:—

	Percent.
Industrial production	+28.2
Manufacturing production	+31.9
Capital goods production	+45.0
Consumer goods production	+19.9
Chemical production	+21.7
Petroleum refining	+ 8.6
Iron and steel production	+24.6
Leather production	+25.2
Paper and pulp production	+16.0
Rubber production	+30.6
Textiles production	+34.1
Minerals production	+ 6.5
Petroleum production	+ 3.0
Electric energy production	+16.2

Some big productions—automotive, for example—were curtailed by official edict and materials pinches. Their 1941 gains were not record-making. Then there were others which went far and wide. Production of transportation equipment, other than automobiles, increased 143.7 percent. Sales of these goods jumped 175.6 percent. But inventories increased 142.2 percent. The fact that this category includes ships for air and water helps to explain some figures; others are clarified by the inclusion of railway equipment.

More Work: More Pay

Such increases in production cannot be achieved without more work: the mechanizing of industry stops short of magic. So there were more workers at work in 1941 than there had been for a long time. Comparisons with 1940 at the end of the year were:—

	Percent.
Nonagricultural production employment	+ 7.8
Manufacturing employment	+17.3
Capital goods factory employment	+24.9
Consumer goods factory employment	+10.0
Chemicals, oils, and drugs factory employment	+17.6
Chemicals	+17.4
Coke oven products	+ 2.8
Compressed and liquefied gases	+18.8
Cottonseed products	—11.4
Drug manufacturing	+27.7
Fertilizers	+11.1
Paints, varnishes, and lacquers	+13.3
Paving materials	— 0.8
Perfumes and cosmetics	+10.8
Petroleum refining	+ 6.5
Roofing materials	+13.3
Soap	+14.1

Factory payrolls for most groups increased as follows between the end of 1940 and the end of 1941—so did average pay as shown:—

	Percent.
All manufacturing payrolls	+42.2
Average pay	+21.3
Capital goods payrolls	+52.6
Average pay	+22.2
Consumer goods payrolls	+28.6
Average pay	+16.9
Chemicals, oils, and drugs payrolls	+38.7
Average pay	+18.8
Chemicals	+46.5
Average pay	+24.8
Coke oven products	+18.4
Average pay	+15.2
Compressed and liquefied gases	+34.2
Average pay	+20.0
Cottonseed products	— 2.3
Average pay	+10.3
Drug manufacturing	+44.9
Average pay	+13.5
Fertilizers	+30.1
Average pay	+17.1
Paints, varnishes, and lacquers	+25.3
Average pay	+10.6
Paving materials	+11.6
Average pay	+12.5
Perfumes and cosmetics	+27.1
Average pay	+14.7
Petroleum refining	+24.6
Average pay	+17.0
Roofing materials	+42.7
Average pay	+25.9
Soap	+38.1
Average pay	+21.0

Sales Soared

All the expanding production found ready markets during 1941; could have found more if there had been anything to look with. Much promising—and some cash—export business had to be passed up because the desired goods could not be got. Inability to get desired prices might have been a reason, but prices did not count much—native sellers out of United States export markets had a similarly keen sense of what could be got in addition to the actual value of their wares. That side of the dickering will, of course, be forgotten when those buyers can again get served whence they had been accustomed. United States business methods just are not keyed to permanency of export trading. It will be far better all round if United States businessmen sell machines and plants to Latin America on long, long terms and teach the buyers to industrialize their own lands. Exporting must be a swapping, and this country's business has grown out of that fashion.

Anyhow, the matter is largely academic, there will not be enough of most things for home buyers, so exports will consist wholly of priority goods designed to promote political policies.

The big thing about commerce in 1941 was the vanishing of the influence of demand. The whole idea of selling became one of producing; buying became a lost art, along with selling; all was reduced to the simple formula:—"I can let you have a little —something—next week."

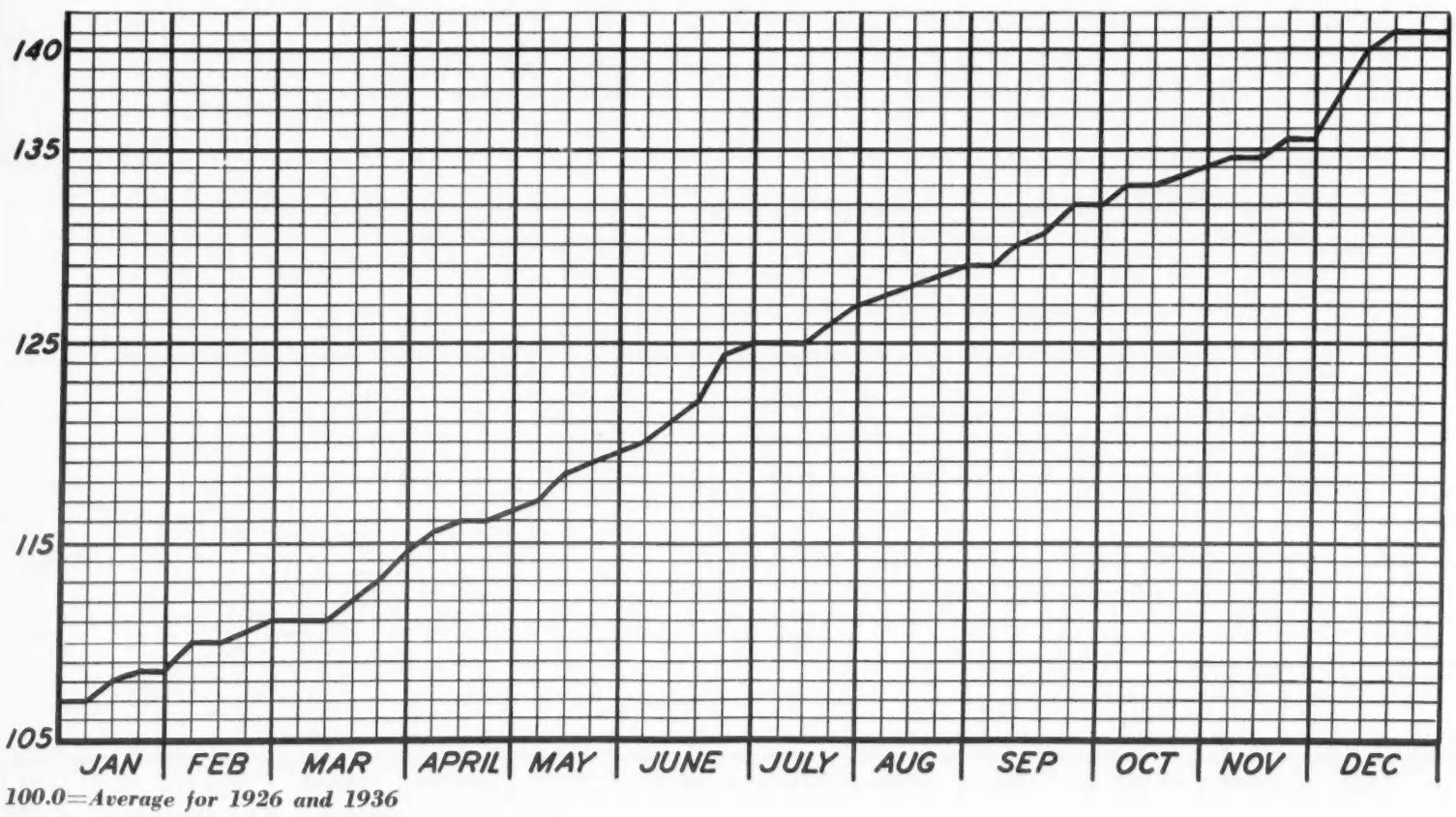
But, the numerical record of sales ran to much bigger figures than ever were known in the heyday of selling or the predepression prodigality of buying. Compared with 1940 some sales in 1941 aggregated as follows;—

	Percent.
Manufacturers' sales in toto	+42.2
Sales of capital goods	+53.5
Sales of consumer goods	+30.2
Sales of chemicals, oils, and drugs	+31.3
Wholesalers' sales, all classes	+31.0
Sales of chemicals	+46.0
Sales of drugs	+16.0
Sales of paints	+36.0
Sales of petroleum products	+25.0
Retail sales, independent stores	+18.0
Drug stores	+12.0
Filling stations	+14.0

In the providing of distributors with goods to sell in such increasing

—*Continued on page* 48

Chemicals, Oils, and Drugs Price Trend Over 1941



100.0=Average for 1926 and 1936

That the United States will marshal its vast resources and give full and *unmistakable* answer is confidently expected. ☆ ☆ American business *must* furnish its answer too . . . by surmounting shortages and production difficulties, *by increased production* ☆ ☆ As a supplier of essential ingredients to the armed forces and to sixty-seven industries, many of them providing vital materials, MAGNUS, MABEE & REYNARD, INC. "*has rolled up its sleeves*" for the duration. ☆ ☆ All of our resources and our long experience will be fused into a great effort to keep supplying ESSENTIAL OILS, BALSAMS, BASIC PERFUME AND FLAVOR MATERIALS, as well as numerous scientifically compounded replacements for out of the market and hard to obtain oils.

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Plant Expansions in 1941

Stepping up production to capacity and formulating plans for expansion of manufacturing facilities, in an effort to keep pace with increasingly heavy orders originating as a result of the national defense program and the enactment of the lease-lend act, was evident during 1941 in the fields covered by the OIL, PAINT AND DRUG REPORTER.

Especially prominent in the program of plant construction were contracts, allotted by the government, for erection of some twenty new units for the manufacture of smokeless powder. These contracts totaled more than $1,000,000,000. Unlike World War No. 1, the government will own the plants and industry will operate them on a management-fee basis.

Not only was the program of the government designed for construction of smokeless powder units, shell loading and other auxiliary plants, but an unique phase in the defense plan provided for the building of plants to make raw materials utilized in the explosive industry.

Title to these plants, operated on a management-fee basis, was vested in the government agency named the Defense Plant Corporation. At the end of 1941, five aluminum plants, six magnesium projects, and a unit for the extraction of toluol from petroleum, were being built for the Defense Plant Corporation.

The location of the proposed aluminum plants of the Defense Plant Corporation, together with the company-operators are:—Aluminum Company of America, three plants, one of 100,000,000 pounds capacity in Arkansas; one of 90,000,000 pounds capacity in Bonneville-Grand Coulee area, and a third of 150,000,000 pounds at Massena, N. Y. Union Carbide & Carbon Corporation, one plant, 60,000,000 pounds at Spokane, Wash.; Reynolds Metal Company, one plant, 100,000,000 pounds at Lister, Ala.; Bohn Aluminum & Brass Corporation, one plant, 70,000,000 pounds at Los Angeles; and Olin Corporation, Alton, Ill., one plant, 30,000,000 pounds at Tacoma, Wash.

Among the government-owned magnesium projects are:—At Painesville, Ohio, $16,000,000 plant, to be operated by Diamond Alkali Company, Pittsburgh, capacity 36,000,000 pounds; at Lake Charles, La., $16,000,000 plant, to be operated by Mathieson Alkali Works, New York, 30,000,000 pounds; at Austin, Tex., International Agricultural Chemical Company, Chicago, capacity 24,000,000 pounds, together with a chloride plant, both costing $12,317,000; and at Freeport, Tex., to be operated by the Dow Chemical Company, Midland, Mich., capacity of 72,000,000 pounds, to cost $52,000,000.

The toluol project called for construction of a plant at Baytown, Tex., at a cost of $11,857,000, and was to be operated by the Humble Oil & Refining Company.

Another feature in the government-owned plant set-up was the awarding of management contracts to industrial companies to run shell loading plants. In this category was the Sherwin-Williams Company, paint manufacturer, Cleveland, which organization was named to manage the $40,000,000 shell loading plant at Marion, Ill. The Procter & Gamble Company, soap manufacturer, Cincinnati, was also appointed to manage a shell loading unit at Milan, Tenn. E. I. du Pont de Nemours & Co. also held a $400,000,000 plant account.

Among the industrial plant extensions in 1941 were:—

Alumina Sulphate:—General Chemical Company, subsidiary of Allied Chemical & Dye Corporation, New York, constructed a plant in Vancouver, Wash., for manufacture of aluminum sulphate.

Alumina Sulphate:—Stauffer Chemical Company, New York, built a $100,000 aluminum sulphate unit in Portland, Ore.

Ammonia Theocyanate: — Koppers Company, Pittsburgh, started large scale production of ammonia thiocyanate at Everett, Mass.

Asphalt:—Wishnick-Tumpeer Company, New York, increased asphalt production at its Chicago and Lawrenceville plants.

Aviation Gasoline:—Reconstruction Finance Corporation announced plans to loan $50,000,000 for building of fifty new refineries and by-products plants to raise the present output of 100-octane gasoline.

Bichromates: — Mutual Chemical Company, New York, purchased a parcel of land near its Baltimore plant for future production.

Butadiene:—Shell Oil Company started construction of plant for butadiene production in Houston, Tex.

Butadiene:—Standard Oil Company of Louisiana started building $7,500,000 butadiene plant, at Baton Rouge, with a capacity of 15,000 tons annually.

Bauxite:—American Cyanamid & Chemical Corporation formed jointly with the Pennsylvania Salt Manufacturing Company a company known as Berbice Company, Ltd., to mine and refine bauxite deposits on the Berbice river in British Guiana.

Butadiene:—Shell Oil Company and the Shell Chemical Company started erection of a plant for the manufacture of rubber from petroleum in Deer Park, Texas, costing $3,000,000.

Butadiene: — Monsanto Chemical Company, St. Louis, Mo., purchased a $450,000 Texas City plant for production of butadiene.

Chlorine:—United States laid plans to construct a chlorine plant in order to obtain sufficient aluminum chloride to supply the needs of a treble expansion of the refinery capacity of 100 octane gasoline.

Calcium Carbide:—Union Carbide & Carbon Company, New York, laid plans for a plant on Pacific coast, to manufacture calcium carbide and ferrosilicon.

Chemicals:—J. T. Baker Chemical Company, Phillipsburg, N. J., built two additional units at a cost of $60,000.

Chlorates:—Pennsylvania Salt Company, Philadelphia, started production of a potash and soda chlorate plant at Portland, Ore.

Coaltar, Light Oils:—Portland Gas & Coke Company:—Portland, Ore., spent $1,250,000 to increase production of light oils, toluols, xylols and solvent naphtha.

Cobalt Salts:—Electro Metallurgical Sales Company, Niagara Falls, N. Y., a unit of Union Carbide and Carbon Corporation, started production of cobalt metal and its salts at a $600,000 plant. The ore was being supplied from deposits in the Belgium Congo.

Containers:—Pacific Can Company, San Francisco, Cal., constructed new plant in San Leandro, Calif.

Containers: — Gaylord Container Corporation, New York spent $6,000,000 for expansion at its Bogalusa, La., plant.

Containers:—Rheem Manufacturing Company built a container plant in Chicago at a cost of $75,000. The company also expanded facilities at its Sparrow Point, Md. unit.

Copper Sulphate: — Phelps Dodge Refining Corporation, New York, installed equipment for production of copper sulphate by new method at its Laurel Hill, L. I. Refinery.

Dyes:—Tennessee Eastman Corporation, Eastport, Tenn., entered the acetate dye manufacturing field.

—*Continued on page* 80

Trends of Things

—*Continued from page* 46

volumes and in doing the other parts of their growing job, the railroads of the country loaded 16.3 percent more freight cars than they loaded in 1940—and they had net operating incomes about 50 percent larger.

Inventories Increased

It is a fact that all the bigger production moving into distributive channels did not get all the way to consumers. In truth inventories piled up in good-sized anticipations as follows:—

	Percent.
Manufacturers' inventories, all	+29.9
Capital goods	+35.7
Consumer goods	+24.2
Chemicals and related materials	+13.2
Petroleum products	+ 7.7
Wholesalers' inventories, all	+24.0
Chemicals	+46.0
Drugs	+16.0
Paints	+19.0
Petroleum products	+78.0

ALKALOIDS

GLUCOSIDES—DRUG EXTRACTIVES

As in WORLD WAR I

Now in WORLD WAR II

Our laboratories are answering the challenge of keeping pace with the unprecedented demand for alkaloids, glucosides, and allied drug extractives for domestic consumption and for export to other countries of the Western Hemisphere.

Our alkaloidal chemists and botanical staff are cooperating with you to the utmost in coping with the present emergency in regard to our supplying this vital group of drug products. The service that we are rendering is backed by twenty-four years of continuous production of alkaloids, World War I experience, comprehensive research endeavors, and extensive manufacturing facilities.

ACONITINE
ARECOLINE
ASPIDOSPERMINE
ATROPINE
BERBERINE
CHRYSAROBIN
COLCHICINE
DIGITALIN
EPHEDRINE
ESERINE
HOMATROPINE
HYDRASTINE
HYOSCINE
HYOSCYAMINE
LOBELINE
PICROTOXIN
PILOCARPINE
SANGUINARINE
SPARTEINE
STROPHANTHIN
YOHIMBINE

INLAND ALKALOID COMPANY

Manufacturing Chemists

TIPTON INDIANA U. S. A.

Chemicals, Oils, and Drugs Price Records

Industrial Chemicals

	1935. H.	1935. L.	1937. H.	1937. L.	1939. H.	1939. L.	1940. H.	1940. L.	1941. H.	1941. L.
Acid, acetic, 28%.....	$2.40	$2.45	$2.53	$2.23	$2.23	$2.23	$2.23	$2.23	$3.18	$2.23
Chromic, 99%.....	.14¾	.13¾	.15¼	.14¾	.15¾	.15¼	.15¼	.15¼	.16¼	.15¼
Formic, 90%.....	.11	.11	.11	.10½	.10½	.10½	.10½	.10½	.10½	.10½
Hydrofluoric, 30%.....	.07	.07	.07	.07	.07	.06	.06	.06	.06	.06
Muriatic, 20°.....	1.10	1.10	1.15	1.10	1.15	1.15	1.15	1.15	1.15	1.15
Nitric, 36°.....	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Oxalic	.11½	.11½	.10¾	.10¾	.10¾	.10¾	.10¾	.10¾	.11¼	.10¾
Sulphuric, 66°.....	15.50	15.50	16.50	15.50	16.50	16.50	16.50	16.50	16.50	16.50
Alum, ammonia, gran..	2.75	2.75	3.00	2.75	3.50	3.15	3.50	3.50	4.00	3.50
Alumina sulphate, com.	1.35	1.35	1.35	1.35	1.15	1.15	1.15	1.15	1.15	1.15
Ammonia, anhy., com..	.04½	.04½	.04½	.04½	.04½	.04½	.05	.04½	.05	.05
Antimony, n'dle, C'nese	.12½	.07¾	.17½	.11½	.20	.12	.25	.18	.25	.19
Arsenic, white.....	.03½	.03½	.03	.03	.03	.03	.03½	.03	.04	.03½
Barium chloride, tech..	72.00	72.00	77.00	72.00	77.00	77.00	77.00	77.00	77.00	77.00
Calcium acetate.....	2.10	2.00	2.25	1.65	1.90	1.65	1.90	1.90	3.00	1.90
Arsenate	.06	.06	.06½	.06½	.06¾	.06¼	.06½	.06	.06½	.06
Chloride, flake.....	22.00	19.50	23.00	22.00	22.00	22.00	22.00	20.50	20.50	18.50
Chlorine, liq., tech....	2.15	2.00	2.15	2.15	2.00	1.75	1.75	1.75	1.75	1.75
Cobalt oxide, black.....	1.39	1.25	1.67	1.41	1.84	1.67	1.84	1.84	1.84	1.84
Copper carbonate.....	.14½	.14½	.19	.14½	.169	.14	.169	.161	.18	.16½
Sulphate, 99%.....	3.85	3.85	6.00	4.45	4.75	4.10	4.75	4.60	5.15	4.75
Copperas	12.00	12.00	12.00	12.00	16.00	14.00	16.00	14.00	14.00	14.00
Epsom salt, tech.....	2.10	1.70	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80
Formaldehyde	.06	.06	.05¾	.05¾	.05¾	.05¾	.05¾	.05½	.05½	.05½
Glaubers salt, dom.....	.85	.85	.95	.95	.95	.95	.95	.95	1.05	.95
Lead acetate, wh., brok.	.11	.11	.13½	.11	.11	.10	.11	.11	.12	.11
Arsenate	.09	.09	.13	.10	.11	.10	.11	.08½	.09½	.09
Litharge, common.....	.06	.05	.09¼	.06¼	.0710	.0635	.0710	.0640	.0735	.07
Magnesia, calc., tech..	.23	.23	.23	.23	.26	.26	.26	.26	.26	.26
Magnesium chloride, fl..	36.00	36.00	39.00	39.00	32.00	32.00	32.00	32.00	32.00	32.00
Manganese sulph., anhy.	.09	.05	.07	.07	.08	.07	.10½	.08	.10½	.10½
Nickel salt.....	.13	.12½	.13	.13	.13	.13	.13	.13	.13	.13
Phosphorous, red.....	.44	.40	.40	.40	.40	.40	.40	.40	.40	.40
Potash carbonate, calc.	.09	.08½	.06½	.06½	.06½	.06½	.06½	.06½	.06½	.06½
Caustic, solid.....	.06¼	.06¼	.06¼	.06¼	.06¼	.06¼	.06¼	.06¼	.06¼	.06¼
Chlorate, powd.....	.08¾	.08	.08½	.08½	.10	.08½	.10	.09½	.09¾	.09½
Saltpeter, gran.....	5.90	5.90	6.50	6.00	6.50	6.50	7.60	6.50	8.10	7.60
Soda ash, 58% light....	1.05	1.05	1.23	1.05	1.05	1.05	1.05	1.05	1.05	1.05
Caustic, solid.....	2.55	2.55	2.60	2.30	2.30	2.30	2.30	2.30	2.30	2.30
Chlorate, dom.....	.06¼	.06¼	.06¼	.06¼	.06¼	.06¼	.06¾	.06¼	.06¼	.06¼
Phosphate, tribas.....	2.65	2.10	2.00	1.85	2.25	2.00	2.25	2.25	2.70	2.25
Silicofluoride	.05	.04½	.06½	.05¾	.05¾	.04	.08½	.05¾	.12	.08½
Sulphur, crude, mines..	18.00	18.00	18.00	18.00	16.00	16.00	16.00	16.00	16.00	16.00
Tin crystals.....	.39	.36½	.45½	.34	.40	.36½	.38½	.36	.39½	.38

Coaltar Chemicals

Acid, Benzoic, tech.....	.40	.40	.43	.43	.43	.43	.43	.43	.43	.43
Cresylic, high-boil....	.51	.42	.89	.72	.68	.49	.68	.68	.81	.68
Sulphanilic, tech.....	.18	.18	.17	.17	.17	.17	.17	.17	.17	.17
Tobias	.75	.70	.65	.65	.65	.55	.55	.55	.55	.55
Alphanaphthylamine ...	.33	.33	.32	.32	.32	.32	.32	.32	.32	.32
Anilin oil.....	.15	.15	.15	.14½	.15	.15	.15	.15	.15	.15
Benzol, 90%.....	.18	.15	.16	.16	.16	.16	.16	.14	.15	.14
Creosote oil, crude.....	.12	.11½	.13½	.13	.13½	.13½	.13½	.13½	.15½	.13½
Dinitrobenzene	.17	.17	.16	.18	.18	.18	.18	.18	.18	.18
Dinitrophenol	.23	.23	.23	.23	.22	.22	.22	.22	.22	.22
Diphenylguanidine	.30	.36	.35	.35	.35	.35	.35	.35	.35	.35
Hexamethylenetetramine, tech.....	.37	.35	.35	.35	.35	.32	.32	.32	.32	.32
Methyl chloride, cyl....	.45	.45	.37	.32	.32	.32	.32	.32	.32	.32
Monoamylamine	1.00	1.00	1.00	.55	.55	.53	.53	.53	.53	.53
Naphthalene, crude, dom.	3.00	1.65	3.00	2.00	2.25	2.25	2.25	2.25	2.50	2.25
Nitrobenzene, d.d.....	.08½	.08½	.07½	.07½	.07	.07	.07	.07	.07	.07
Paradichlorobenzene ..	.16	.16	.16	.11	.11	.11	.11	.11	.11	.11
Phthalic anhydride.....	.14½	.14½	.14½	.14½	.14½	.14½	.14½	.14½	.14½	.14½
Resorcinol, tech.....	.75	.75	.75	.75	.75	.75	.75	.68	.68	.68
Tar acid oil, 15%.....	.22½	.21	.22½	.21	.22	.21	.22	.22	.27½	.22
Toluol, pure.....	.30	.30	.30	.30	.25	.22	.27	.25	.28	.27
Trichlorethylene	.09½	.089	.089	.089	.09	.08	.08	.08	.08	.08
Xylidin, mixed.....	.36	.36	.35	.35	.35	.35	.35	.35	.35	.35
Xylol, common.....	.30	.30	.30	.30	.27	.26	.27	.26	.27	.26

Dyestuffs, Textile, and Leather Chemicals

Acid, Tannic, tech.....	.22	.22	.40	.19	.40	.40	.54	.40	.71	.54
Albumen, egg, edible...	1.05	.82	1.05	1.05	.75	.60	.65	.53	1.80	.65
Annatto seed.....	.07	.07	.07¾	.07	.07½	.06½	.06½	.06½	.06½	.06
Bleaching powder.....	2.00	1.90	2.00	2.00	2.00	2.00	2.00	2.00	2.25	2.00
Chestnut ext., clarif...	.01½	.01½	.02½	.01⅝	.01¾	.01⅝	.01¾	.01⅝	.02¼	.01¾
Cochineal, gray.....	.34	.32	.36	.32	.37	.35	.37	.37	.37	.37
Corn syrup, 42°.....	3.63	3.18	4.36	3.11	3.27	2.92	3.47	3.02	3.52	3.47
Cutch	.04	.03½	.04	.04	.04¼	.04	.04½	.04½	.04¾	.04½
Dextrin, corn, white....	4.00	3.55	4.85	3.45	3.50	3.30	3.80	3.35	3.95	3.80
Dye, sulphur black.....	.20	.20	.20	.20	.20	.20	.20	.20	.20	.20
Egg yolk, dried, dom...	.63	.52	.68	.68	.67	.59	.60	.57	1.00	.60
Fustic, ext., cryst.....	.20	.20	.22	.20	.24	.22	.24	.24	.28	.24
Gambier, common.....	.06¾	.05¾	No price		.07	.06¾	.07	.06	.10	.06½
Hemlock ext., 25% tan..	.02½	.02½	.03	.02¾	.03	.02⅝	.03	.02¾	.03	.02¾
H'dr'gen perox., 100 vol.	.21	.20	.20	.19½	.20	.20	.20	.16	.16	.16
Indigo, synth., liq.....	.13	.12	.16½	.13	.16½	.16½	.16½	.16½	.16½	.16½
Logwood, ext., 51°.....	.08½	.08½	.09½	.08½	.10½	.09½	.10¼	.10½	.12½	.10½
Myrobalans, J2.....	15.75	14.75	23.00	16.75	27.50	17.00	34.00	23.50	39.00	28.00
Nutgalls, Alleppo.....	.20	.16	.20	.19	.29	.23	.29	.26	.28	.27
Oak ext., 25% tannin...	.02¾	.02¾	.03½	.02⅝	.02¾	.02¾	.02¾	.02¾	.03	.02
Potash bichromate.....	.08½	.08½	.08¾	.08⅝	.08¾	.08¾	.08¾	.08¾	.09⅝	.08¾
Quebracho, ext., 35%...	.02⅝	.02⅝	.03	.02⅞	.03½	.02⅞	.04¼	.03½	.05¼	.03⅝
Sago flour.....	.02¾	.02¾	.03¼	.02¾	.04	.02½	.04	.03½	.05½	.03½
Soda bichromate.....	.06¼	.06¼	.06¾	.06⅝	.06¾	.06¾	.06¾	.06¾	.07⅜	.06¾
Hydrosulphite	.21	.18	.16	.16	.16	.16	.17	.16	.17	.17
Starch, corn, pearl.....	3.58	3.13	4.33	2.93	2.65	2.45	2.95	2.50	3.10	2.95
Sumac ext., 42°.....	.04½	.04½	.05¼	.04½	.07	.05¼	.07	.07	.07	.07
Valonia, cups.....	49.00	26.00	37.50	31.75	39.00	30.00	42.00	33.00	No price	

Paint, Varnish and Lacquer Materials

Acetone, C.P.....	.11	.11	.06	.04¾	.06	.04¼	.06	.05	.07	.06
Alcohol, butyl, norm...	.12	.11	.09	.09	.09	.07	.09	.08	.10	.09
Amyl acetate, ex-fusel.	.11	.11	.11½	.10½	.12½	.09½	.12½	.11½	.12½	.11½
Barytes, dom., floated..	33.05	31.50	31.50	31.50	31.50	31.50	31.50	31.50	31.50	31.50
Black, carbon, standard	.0335	.0335	.0335	.0410	.0375	.0375	.0395	.0375	.0395	.0343
Blue, Prussian.....	.37	.36½	.36	.36	.36	.33	.33	.33	.36	.33
Brown, sienna, Amer., burnt	.03	.03	.03	.03	.03¼	.03	.03¼	.03¼	.03¼	.03¼
Casein, dom., 20-30.....	.15	.10½	.19½	.13	.20	.07	.16	.10	.31	.13
Cellulose acetate, flake..	.55	.55	.55	.40	.36	.35	.35	.30	.30	.30
Ethyl acetate, 85%.....	.07½	.07½	.06½	.06½	.06½	.051	.06¼	.06½	.07½	.06½
Green, chrome, to 5%...	.20	.20	.21	.20	.21	.21	.21	.21	.23	.21
Gum, copal, Congo, w.w.	.41⅝	.35½	.46	.42¾	.49½	.34¾	.49½	.49½	.49½	.49½
Dammar, Bat., A/E..	.13	.11⅛	.17¼	.14½	.13¾	.11⅞	.13¾	.12⅞	.25⅝	.12⅞
Ester	.07⅜	.07¼	.11½	.09	.06¼	.06	.06¼	.06¼	.08¼	.06¼
Lead, red, 95%, dry....	.07	.06	.10¼	.07¼	.0810	.0735	.0810	.0740	.0835	.08
White, bas. carb.....	.065	.065	.09	.0675	.07	.07	.075	.07	.075	.075
Lithopone, ord.....	.04½	.04½	.04½	.04¼	.04⅛	.0375	.0385	.0360	.0385	.0385
Nitrocellulose, a/s.....	.29½	.27½	.28	.22	.28	.28	.28	.28	.28	.28
Red, Indian, pure.....	.08¾	.08¾	.08¾	.08¾	.08¾	.08¾	.08¾	.08¾	.09¼	.08¾
Rosin, gum, F.....	6.02½	5.05	9.50	6.05	6.60	5.35	6.70	1.80	3.50	2.11
Shellac, T.N.....	.18⅞	.13	.14	.12	.19	.09½	.19	.13	.32	.15
Titanium dioxide, reg...	.17	.17	.16	.16	.14	.13	.13½	.13	.14½	.13½
Turpentine spirits, gum.	.53¾	.43½	.42½	.31½	.34½	.28½	.38¾	.31½	.87½	.44
Whiting, chalk, comm..	11.20	11.20	12.00	12.00	12.00	12.00	16.00	12.00	18.00	16.00
Yellow, chrome, C.P....	.15	.11	.14½	.13	.14½	.13½	.13½	.13½	.16	.13½
Zinc oxide, lead-free....	.06½	.05	.06½	.05½	.06¾	.06¼	.06½	.06¼	.06½	.06½
Stearate, tech.....	.19	18	.20	.20	.23	.20	.23	.22	.30	.22

Fertilizer Materials

Ammonia sulphate, dom.	24.00	23.00	28.00	26.00	28.00	28.00	30.00	28.00	30.00	30.00
Phosphate rock, Fla., 68%	3.40	1.85	1.85	1.85	1.90	1.90	1.90	1.90	2.00	1.90
Potash manure salt, 30%	.48	.43	.58½	.55	.58½	.58½	.60	.58½	.60	.60
Muriate, 95%.....	.45	.40	.53½	.50	.53½	.53½	.53½	.53½	.56	.53½
Soda nitrate, crude.....	23.50	23.50	29.00	25.50	27.00	27.00	27.00	27.00	27.00	27.00
Superphosphate, pile....	8.00	7.75	8.50	7.50	8.50	7.50	8.50	8.00	9.50	8.00
Urea, dom., 46%.....	100.00	95.00	95.00	95.00	95.00	95.00	95.00	85.00	85.00	80.00

Oils, Fats and Waxes

	1935. H.	1935. L.	1937. H.	1937. L.	1939. H.	1939. L.	1940. H.	1940. L.	1941. H.	1941. L.
Acid, stearic, doub-pres.	.11¾	.10	.12½	.11	.12½	.10	.12	.09	.14¼	.09½
Degras, common.....	.05¼	.04½	.08¼	.07½	.10	.07	.09½	.08	.08¾	.07½
Lard, Western, choice..	17.75	10.90	14.30	8.80	8.75	5.75	7.05	4.85	11.30	5.20
Oil, castor, No. 3.....	.09½	.09	.09½	.09½	.11½	.07½	.12	.09	.11½	.09
Chinawood	.35	.088	.24	.11½	.25	.14	.26	.21	.35¾	.26¼
Coconut, crude.....	.06	.03½	.08½	.03¾	.04¾	.02½	.03¾	.02¾	.09½	.03
Cod, N.F.....	.36	.34	.52	.48½	.72	.32	.72	.60	.78	.60
Corn, crude.....	.11	.08¾	.10½	.06½	.07¼	.04¾	.06¾	.05½	.13	.06½
Cottonseed, crude.....	.10½	.08⅝	.10½	.05¾	.06¾	.04¼	.06¼	.04¼	.12¾	.05¼
Linseed, raw.....	.096	.077	.107	.093	.102	.078	.102	.077	.106	.084
Menhaden, crude.....	.36	.25	.45	.34	.36	.21	.36	.21	.62	.30
Neatsfoot, extra.....	.11¼	.08½	.18¼	.16⅜	.20¼	.14¾	.19¼	.15¼	.26½	.13½
Oleo, No. 1.....	.15	.10¼	.14	.12½	.12	.08	.08	.07¼	.13¼	.07⅜
Olive, denat.....	.94	.80	1.60	1.15	1.40	.80	2.40	.93	4.00	2.25
Palm, Niger.....	.0575	.0365	.07⅛	.04	.05	.03⅝	.05	.03¾	.09	.04¼
Peanut, crude.....	.10¾	.09½	.10¾	.06⅝	.07¼	.05⅝	.06¾	.05¼	.13	.05¼
Perilla	.10	.07	.13½	.10½	.15½	.089	.21	.15½	.21½	.16½
Red	.08¾	.06½	.10¾	.08¾	.08½	.06¼	.08	.05¾	.11¼	.06¼
Sardine, crude.....	.37	.24½	.54½	.35	.38	.22	.45	.24½	.63	.39
Soybean, crude.....	.1060	.0870	.1080	.0600	.0650	.0450	.0650	.0425	.1175	.0550
Whale, ref., nat.....	.077	.064	.107	.081	.091	.077	.091	.091	.107	.091
Tallow, extra, loose....	.07⅛	.05⅝	.09¼	.05¾	.07	.04¾	.05¾	.03¾	.09½	.05
Wax, bees, yellow, Af..	.24	.21	.29½	.25	.27	.29	.30	.23	.46	.29
Candelilla	.16	.10	.15½	.13	.18½	.15½	.19	.18	.33	.19
Carnauba, 3 chalky...	.38	.21	.38	.33	.45	.28	.57	.45	.76	.56
Spermacetti	.22	.19	.23	.23	.22	.18	.24	.22	.24	.24

Drugs and Fine Chemicals

Acetanilide, U.S.P.....	.24	.24	.29	.24	.30	.30	.30	.30	.30	.30
Acid, Acetylsalicylic, standard	.70	.70	.60	.50	.50	.40	.40	.40	.40	.40
Boric, tech.....	80.00	95.00	95.00	95.00	96.00	96.00	96.00	96.00	99.00	96.00
Citric, cryst.....	.28	.28	.25	.24	.22	.20	.20	.20	.20	.20
Phosphoric, U.S.P., 50%	.14	.14	.14	.12	.12	.12	.12	.12	.12	.10½
Tartaric, U.S.P.....	.24	.24	.24¾	.21¾	.31¼	.27¼	.46¼	.31¼	.70½	.46¼
Agar, No. 1.....	.90	.52	1.15	.72	1.50	.90	1.50	1.40	3.00	1.40
Alcohol, benzyl.....	.75	.65	.68	.63	.63	.63	.63	.63	.63	.63
Special, denatured, 1..	.31	.29½	.27	.26	.22½	.19½	.24½	.22½	.27½	.24½
Amyl salicylate.....	.65	.65	.65	.51	.51	.51	.51	.51	.51	.51
Atropine sulphate.....	2.25	2.25	2.85	2.20	4.00	2.50	5.45	4.00	21.00	5.45
Benzyl benzoate, a.m.a.	1.00	.95	.94	.90	.89	.84	.84	.84	.95	.84
Bismuth subnitrate.....	1.40	1.30	1.30	1.13	1.48	1.33	1.48	1.48	1.48	1.20
Borax, tech.....	40.00	36.00	42.00	40.00	43.00	43.00	43.00	43.00	45.00	43.00
Bromine, purif.....	.36	.30	.36	.30	.30	.30	.30	.25	.25	.25
Caffeine	2.15	2.15	2.20	2.05	2.20	2.20	2.60	2.20	2.60	2.60
Camphor, nat. tabs.....	.60	.54	.60	.55	.82	.53½	.90	.85	1.70	.80
Chloroform, tech.....	.20	.20	.20	.20	.20	.20	.20	.20	.20	.20
Corrosive sublimate....	.76	.71	1.22	1.05	1.99	1.05	2.24	1.89	2.24	2.04
Ergot, U.S.P.....	2.10	.32	2.05	1.50	3.50	1.25	3.85	1.70	2.10	1.55
Glycerin, C.P.....	.14	.14	.21¼	.14	.29	.19½	.12¾	.12½	.18¾	.12½
Iodine, resub.....	1.90	1.65	1.50	1.50	2.00	1.75	2.00	1.75	2.00	1.75
Menthol, Japanese.....	3.75	2.80	3.45	3.10	3.35	2.90	3.65	3.45	14.00	3.50
Syn., tech.....	2.25	2.25	2.25	2.25	2.50	2.25	2.50	2.50	3.65	2.50
Methanol, nat., denat..	.40	.40	.45	.30	.40	.35	.40	.40	.60	.40
Synth, ...	.35½	.35½	.35½	.33	.33	.33	.33	.30	.30	.28
Methyl salicylate.....	.40	.40	.40	.32	.35	.35	.35	.35	.35	.35
Oil, codliver, U.S.P....	24.50	26.00	27.50	25.00	40.00	20.00	70.00	32.00	85.00	67.00
Opium, gum, U.S.P....	11.50	12.40	11.50	11.50	11.50	11.50	11.50	11.50	13.00	11.50
Papain, powd.....	3.00	1.75	2.75	.90	2.10	1.10	1.60	1.40	2.75	1.40
Phenol, U.S.P.....	.14¼	.14¼	.14¼	.13¾	.14½	.13	.13	.12	.12½	.12
Phenolphthalein, U.S.P.	.65	.50	.85	.75	.85	.85	.85	.85	.85	.85
Potash bromide.....	.35	.35	.31	.31	.31	.31	.31	.27	.27	.27
Permanganate, tech..	.18½	.18½	.18½	.18½	.18½	.18½	.19¼	.18¾	.19¾	.19¼
Quicksilver, dom.....	76.00	69.50	97.00	81.00	160.00	77.00	200.00	154.00	212.00	163.00
Quinine sulphate.....	.51	.51	.59½	.59¾	.64	.61	.67	.64	.67	.67
Rochelle salts, powd....	.13½	.13	.16	.13½	.20¾	.17¾	.29¼	.20⅜	.42½	.29¼
Santonin, cryst.....	70.00	26.00	43.00	25.00	130.00	21.00	150.00	130.00	195.00	150.00
Silver nitrate.....	.51⅜	.35⅜	.33⅜	.32¼	.31½	.27	.26⅜	.26⅜	.26⅜	.24
Soda benzoate, U.S.P...	.46	.46	.39	.39	.46	.39	.46	.46	.46	.46
Bicarbonate, U.S.P...	1.85	1.85	1.85	1.75	1.85	1.70	1.85	1.70	1.85	1.85
Strychnine	.63	.63	.48	.48	.60	.50	.60	.60	.70	.60
Thymol	1.85	1.65	1.65	1.55	1.55	1.45	1.55	1.45	3.00	1.45

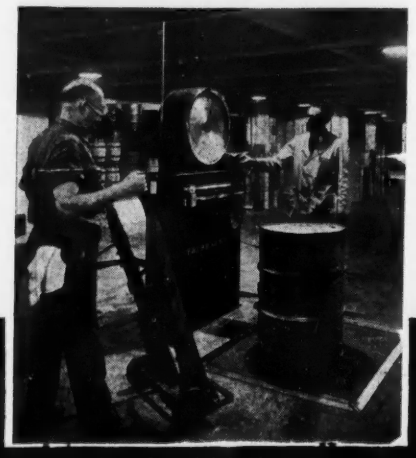
Botanical Drugs, Spices, and Gums

Belladonna, leaves.....	.18	.14	.14	.14	.30	.12½	.95	.24	3.45	1.75
Root	.14	.12	.12	.10	.40	13	2.00	.40	2.40	2.00
Black haw root bark...	.24	.22	.33	.21	.24	.20	.29	.24	.40	.29
Buchu leaves.....	.38	.27	.65	.50	.80	.30	.80	.62	.74	.55
Cascara sagrada bark..	.11	.08	.14½	.11¾	.14	.10	.15	.14	.20	.15
Chamomile flow., Hung.	.27	.20	.28	.20	.60	.20	1.50	.35	1.50	.80
Cinchona bark, short...	.50	.50	.50	.50	.72	.40	.75	.70	.85	.75
Clover tops, dom.....	.14½	.11½	.14	.12	.38	.12	.40	.30	.35	.33
Cramp bark, genuine...	.24	.20	.25	.19	.23	.20	.23	.23	.30	.20
Cream tartar.....	.17¾	.17¼	.19¾	.15	.25¼	.22¼	.38¾	.25¼	.57½	.38¼
Digitalis leaves.....	.30	.24	.65	.25	.40	.35	.35	.35	.50	.35
Ginger root, Cochin.....	.17	.12	.18¼	.14½	.09½	.06¾	.10¾	.09½	.35	.10¾
Goldenseal root.....	2.00	1.05	3.60	2.85	3.60	2.75	3.85	2.75	3.95	2.50
Gum, arabic, sorts.....	.13	.09½	.14½	.09¾	.19	.09	.17½	.10	.24	.14
Myrrh, U.S.P.....	.40	.22	.45	.35	.65	.39	.60	.45	.60	.45
Tragacanth, No. 1....	1.25	1.15	2.75	2.40	2.50	2.25	3.50	2.50	3.50	3.00
Henbane leaves.....	.40	.19	.29	.19	.65	.14½	1.75	.60	3.25	1.75
Jalap root, N.F.....	.14	.12	.17	.17	.24	.15	.35	.24	.55	.28
Lobelia herb.....	.21	.12	.14	.12	.12	.11	.19	.12	.50	.19
Mandrake root.....	.10	.09½	.18	.09¾	.11	.09	.12	.11	.25	.12
Marjoram, French.....	.32	.24	.20	.17	.35	.16	.52	.25	.75	.52
Pyrethrum flowers.....	.27	.14	.18	.12¾	.33	.26	.33	.23	.23	.20
Rhubarb, No. 2.....	.35	.23	1.15	.32	.55	.35	.58	.40	.75	.38
Safflowers, Amer.....	.35	.24	.27	.25	.35	.22	.35	.35	.85	.35
Sage, Dalmatian.....	.04¼	.08	.06½	.02¾	.19	.05¾	1.30	.08¾	2.00	1.30
Sarsaparilla root, Mex.	.12	.12	.20	.15	.19	.13	.19	.15	.20	.16
Senega root.....	.33	.23	.60	.36	.85	.65	.90	.67	.95	.82
Senna leaves, Tinn.....	.13½	.11	.11	.10	.14	.09	.12	.12	.14	.11
Soapbark, whole.....	.07	.07	.07	.07	.23	.07	.23	.13	.13	.09
Stramonium leaves.....	.13	.08	.11	.11	.17	.13	.45	.17	.48	.27
Tonka beans, Angos....	2.75	1.85	2.50	2.50	2.40	2.40	2.40	2.40	2.40	2.40
Uva Ursi leaves.....	.07	.06½	.25	.11	.11	.08	.11	.10	.18	.11
Valerian root.....	.23	.13½	.12	.09	.27	.09½	.95	.27	1.15	.75
Vanilla beans, Mexican.	3.50	3.25	4.50	4.00	6.50	5.00	9.50	6.00	15.00	9.00
Wild cherry bark.....	.05	.05	.04½	.04½	.07	.04½	.07	.07	.07	.07

Essential Oils and Aromatic Chemicals

Citronellol	2.50	2.10	1.80	1.75	1.60	1.60	1.60	1.60	1.75	1.60
Coumarin	3.10	3.10	3.00	3.00	2.75	2.75	2.75	2.75	2.75	2.75
Geraniol, soap.....	1.10	1.00	.75	.60	.67	.60	.60	.60	1.10	.60
Ionone	3.50	3.50	3.25	1.30	2.50	2.50	2.75	2.50	2.75	2.75
Oil, anise, U.S.P.....	.57½	.40	1.45	.70	.85	.63	.85	.68	2.00	.78
Cassia, U.S.P.....	1.50	1.10	1.25	.90	1.20	.88	1.50	1.20	10.00	1.50
Citronella, Ceylon.....	.28	.22	.42	.32	.46	.34	.46	.37	1.00	.37
Clove, U.S.P.....	.90	.85	1.25	1.05	1.55	.95	1.33	1.05	1.40	1.05
Eucalyptus, Austral..	.29	.24	.44	.39	.59	.33	.66	.59	.70	.63
Geranium,

BACKGROUND VALUES . . . a PART of the product, APART from the price



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O.P.D. Markets During 1941

Heavy Chemicals

The progressive shifting from a peace time to a war time basis greatly stimulated business in the market for heavy chemicals throughout the year 1941. The actual declaration of war late in the year intensified efforts toward national defense, and further subordinated civilian business. The passage of the lease-lend act and declaration of a national emergency were major factors leading to closer government control. A number of regulations were promulgated to direct shipments and production to the proper channels. Priorities allocations, price controls, export license and limitations on output and inventories were detailed steps taken to effect the transformation.

Production increased considerably over the preceding year, and efforts were accelerated to complete additional plant facilities. Shortages appeared in a number of basic chemicals, strategic metals and raw materials as supplies were diverted from regular channels. A definite upward trend occurred in prices as production costs increased. A resale market developed for materials difficult to obtain.

A broad buying movement occurred from the start of the year as national defense efforts were intensified, reflecting the serious aspects of the war abroad. Industrial activity was at high levels, especially the durable goods. Producers discouraged forward buying, and orders were exceeding available supplies in a number of chemicals.

In January export control was broadened to include potash and nickel salts. The following month a chemical priority division was established by the OPM to issue priority orders for the fulfillment of national defense contracts whenever and wherever supplies of materials and equipment threatened to become scarce or were being diverted to non-defense use.

The imposition of formal priorities on aluminum was the first mandatory industry-wide priority to be invoked under the defense program. Other shortages began to occur in strategic metals and their derivatives, consequently such materials as magnesium and nickel were added to the mandatory priority list.

In March, the lease-lend bill passed Congress and the President requested an initial appropriation of $7,000,000,000 which promised to bring a still heavier volume of orders over the ensuing months.

Anhydrous ammonia, chlorine, potash perchlorate, materials used in chemical warfare and explosives were specifically mentioned in a list issued by the priorities division of the OPM as critical items on which the Army and Navy field services could automatically assume priority ratings. Tungsten metal powder and tungsten compounds were placed under a general priority system, giving preference to the United States and British defense orders.

Second Quarter Business

Upward revisions in contract prices appeared during the second quarter of the year. The index for industrial chemicals advanced to 163.8 from 158.2 at the beginning of the period. Labor disturbances began to have a more direct effect on the market.

There was a spread of strikes in key defense industries and a stoppage of soft coal operations in the Appalachian States. A strike on the Pacific coast brought a cessation of shipments of important raw materials in the processing of potash salts.

Further government control measure appeared; price ceilings were established for aluminum, copper, nickel and tungsten. The shortage in some material created a broader demand for chemicals in the outside or resale market. A definite tightening was noted in copper sulphate, with some leading producers withdrawing from the market as far as new business or export orders were concerned.

Chlorine shipments fell behind, which shortage was reflected in carbon tetrachloride and other chlorinated solvents. It was becoming increasingly difficult to obtain potash permanganate. Soda sulphide spot offerings were limited. The same situation prevailed for various fluorides, barium salts, soda acetate, acetic, chromic and oxalic acid. Further shortages took place in metals and salts. Antimony, cobalt, copper, manganese and molybdenum were added to the critical material list.

Third Quarter Trend

Producers were burdened with the rising volume of defense orders carrying priority ratings in the third quarter. Consumers, who were unable to secure supplies from regular sources, were paying premium prices in the outside market. A number of upward price revisions were made at the end of the quarter. Further government regulations were in the offing.

Consideration was given to the establishment of a chemical price division within the Office of Price Administration and Civilian Supply. After issuing a warning that acetic acid prices remain at levels established in July, the OPA issued a price ceiling order for all grades at third-quarter levels.

The growing scarcity of liquid chlorine and its vital importance to the national defense program prompted the OPM priorities division to establish full mandatory regulations in August. The paper industry made two adjustments in chlorine use for bleaching purposes.

The situation in alkalies showed further tightening. Sellers were supplying domestic needs, but premium prices appeared for export. The Army and Navy Munitions Board requested all manufacturers of alkalies in the country to provide statistics on the production and sale of both caustic soda and soda ash to ascertain the amount consumed in the defense program.

At the end of August the OPM issued a regulation requiring all manufacturers, producers, dealers and distributors to give precedence to defense orders. The regulation, broad in its outline, influenced both domestic and lease-lend orders.

A broadening in export control, effective August 29, placed practically all forms, conversions and derivatives of heavy chemicals under export control in addition to those chemicals already listed in the several export orders issued previously. This included organic and inorganic acids, and anhydrides; all other alumina compounds, potassium compounds, sodium compounds, ammonia compounds, metal salts and agricultural insecticides and fungicides.

Potash perchlorate, potash permanganate and phosphorus oxychloride were added to the list of chemicals placed under full priority by the priorities division of the OPM. The order was designed to conserve supplies, and direct their distribution into essential products. All forms of tungsten were placed under government supervision and strict rationing ordered.

Shortages of containers became more pronounced. Producers experienced difficulty in securing many types. Aluminum drums were not being replaced, while heavy steel drums were scarce. Rubber lined and glass carboys were not too plentiful. Many sellers had discontinued burlap packings, and the tendency was toward double-lined paper bags.

Fourth Quarter

A great deal of uncertainty accompanied the declaration of war by the United States in the final month of the year. Despite the many government controls, the stepping up of production facilities and the gradual change-over throughout the year for defense purposes, the war efforts would mean still further transitions. Efforts were under way to speed additional plants to completion. However, not much relief was looked for until some time in 1942. It was estimated that most of the expanded capacity would be absorbed by direct defense requirements. Despite the shortage in many materials estimates placed consumption anywhere from twenty-five to fifty percent ahead of a year ago.

While some price announcements covering the early part of next year were slow in making their appearance, only a few upward adjustments appeared. Sellers were cautious about raising prices, the OPA was watching price movements closely.

Alkali prices were released at substantially the same levels as prevailed previously; no change occurred in anhydrous or aqua ammonia. Adjustments did occur, however, in liquid chlorine multiple units and bleaching powder; the latter was placed on a maximum price basis at the higher levels by agreement between producers and the OPA.

The OPM announced a simplification of the procedure under which preference ratings for defense materials will be handled after January 1. An entire new form will be used listing needs for the first quarter of 1942, when this is done and approved, the government will grant blanket preference ratings. This would eliminate much red tape involved in the various preference orders.

While only a few chemicals were not offered on a contract basis for next year, many of the contracts contained specific war and quantity clauses in order to provide requirements for the defense program. In a good many instances, prices were subject to thirty-day revision in place of the usual quarterly adjustment clause.

The expansion in raw materials needs for defense purposes under priority control made the OPM more vigilant in respect to stricter compliance controls to prevent the use of materials obtained under priorities for other than defense purposes. Inventories were expected to be regulated to keep stocks at a minimum working level.

The OPM placed cobalt metal chemical compounds and all ore under direct allocation control. Arrangements between the OPM and Department of Agriculture, the Civilian Conservation Corps and producers of fumigant mixtures provided for specific allocations of chlorinated solvents during the year.

A further curtailment in tungsten use was announced in December and all supplies of tin were placed under specific allocation and shortly afterward vanadium was placed under a complete allocation system by the Director of Priorities. All chlorine produced in the United States will be subject to direct allocation after February 1, 1942.

Anhydrous Ammonia

The necessity of expanding production of military explosives under the defense program placed anhydrous ammonia among the first chemicals to go on the critical list. The War Department and National Defense Advisory Commission advanced plans for construction of anhydrous ammonia plants ordinanced-owned and agent-operated for the government providing funds for construction and to be operated by private owners under contract. Several of these plants are now under construction in various sections of the country.

The situation in aqua ammonia was expected to tighten before any material improvement takes place. The larger production of anhydrous will be absorbed principally by munition manufacturers, and will not materially bolster that output of aqua ammonia. Since it is the basis for a number of chemical compounds, the supplies will have an important effect on several derivatives.

Alkalies

Heavy defense, civilian and export demand tightened the market for soda ash and caustic soda during the year. A complete reversal in the statistical position of the market occurred from a year ago. Producers were experiencing difficulty in taking care of all inquiries and restricted civilian demands to regular contract allotments. Practically all consuming channels required more soda ash and caustic soda to cope with higher operating schedules.

The government requested all manufacturers of alkali in the country to supply statistics on production and sales to ascertain the amount consumed in the defense industries. The new munition plants and broader requirements for making aluminum were direct factors. Estimates were that consumption has increased anywhere from 10 to 15 percent in civilian lines, and that the bulk of this increase has been in the miscellaneous classification or smaller consuming channels.

Production was expanded by the erection of new plants and extensions to existing facilities. Caustic soda production was benefited by the expansion in chlorine output.

A sharp rise occurred in exports last year. Most of the inquiries came from South America, where Great Britain and other factors were unable to take care of the demand. Because of the heavy drain from domestic channels, many producers were cutting down on amount of material for export. This resulted in a great deal of business in the second-hand or resale market at considerably higher prices.

With the exception of a small revision in the price for burlap bag packings, price schedules for soda ash and caustic soda were carried into 1942 at the same levels as prevailed in the 1941 period.

Chlorine

War demand for chlorinated products resulted in an acute shortage of chlorine. As a result, all chlorine produced in the United States will be subject to direct allocation after February 1, 1942. Previously, chlorine was placed under full priorities control in July, 1941. It was estimated the government absorbed approximately 50 percent of the available production for direct and indirect defense work.

As a first step to meet increased defense requirements, the OPM found it expedient to restrict the industrial use of chlorine. It requested a reduction in the average consumption by paper manufacturers, and the industry complied by cutting its chlorine use for bleaching purposes by forty percent from the current figures.

Plans have been made to increase production facilities to meet the rising needs. The electrolytic process was forced to above capacity ratings by stepping up electric current to maximum load, which in addition to new units under construction, and already completed, bolstered current output to about 700,000 tons. This would compare with the latest Census Bureau figures during 1939 of 485,554 tons.

Chlorinated Solvents

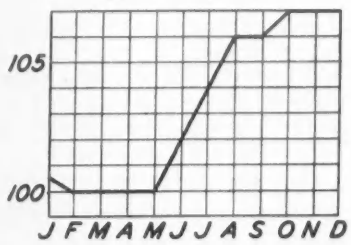
The OPM placed under rigid priority control all stocks of chlorinated solvents. These include carbon tetrachloride, trichlorethylene, perchlorethylene and ethylene dichloride.

Potash Salts

In contrast to World War I domestic supplies of potash were adequate to cover domestic needs. However, in the early part of 1941, a strike at one of the leading potash producing areas seriously interrupted shipments of raw materials for process-

Heavy Chemicals Price Trend Over 1941

(Based on monthly averages for 25 typical materials)



100.0=Dec. 30, 1940-Dec. 29, 1941=107.1

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ing various potash derivatives. This brought about a generally tight situation.

Before and during the last war a large amount of carbonate and caustic potash were imported into this country from Europe. In recent years imports have diminished considerably, and since the outbreak of the present war, arrivals have been negligible. Shipments from domestic sources have been steady, and while some tightening occurred in certain grades of powdered and flake materials, sellers were able to provide for needs of regular consumers. Restrictions on exports have greatly limited shipments to other countries.

A sharp falling off in imports since the war started, stimulated domestic production of potash chlorate. When shipments from such countries as France, Germany, Sweden and Switzerland stopped, our output was stepped up to approximately 600 tons per month. Potash chlorate is an important defense material since it finds its principal use in the manufacture of explosives. The material has been placed on the critical priorities list and is also subject to an export license.

Domestic production of potash cyanide in the past year has been able to provide the limited demand for this material from the electroplating trade. Imports have been entirely stopped since the beginning of hostilities.

Potash permanganate, an important defense material, was another chemical affected by the war. Imports from Europe dropped sharply, and domestic production was expanded about fifty percent to take care of national defense and civilian requirements. Later in the year further expansion occurred in domestic production facilities, and producers were able to handle most of the additional business. It was one of the first chemicals to be placed on the critical priorities list, and like all other potash salts required a license for export.

Acids

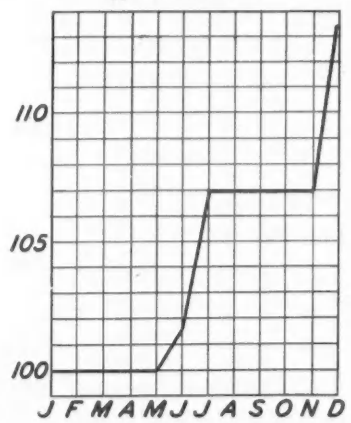
Demand for all acids greatly increased throughout the year. The expansion of operations in major consuming industries, coupled with direct defense requirements, brought about shortages in several mineral acids. Acetic, chromic, formic, oxalic, phosphoric and sulphuric were especially active and, despite efforts to expand existing production facilities were either in a short supply or in a tight position. The price trend firmed during the year, and upward price adjustments occurred in a few acids to bring the index advance from 101.6 percent to 115.4 percent.

The increased demand and shortage of raw materials combined to create a scarcity of acetic acid. It was understood that large quantities of carbide have been diverted to other channels thereby eliminating an important raw material, while lack of sufficient electric power was another factor.

New acetic acid production was not considered sufficient to meet all industrial requirements at the end of last year. Some steps were taken, however, to curtail the use of acetic acid in the manufacture of cellulose acetate for use in critical silk in civilian use. After issuing a warning that acetic acid prices remain at levels established in July, 1941, the OPA order in August placed a ceiling on all grades of acetic acid at the levels in effect during the third quarter.

The situation in chromic showed evidence of tightening as the year progressed. Large quantities were used by the metallurgical industry in plating. The director of the OPM placed chromium under full priority control so as to build up a stock pile and meet the threat of shipping shortage. As a result monthly deliveries of chromium for use in the manufacture of chemical products were limited to the average monthly consumption of the processor over the twelve months through June, 1941.

Acids Price Trend Over 1941
(Based on monthly averages for 20 typical materials)



100.0=Dec. 30, 1940-Dec. 29, 1941=113.6

Oxalic Acid

Demand for oxalic acid was heavy ever since the start of the year. Defense needs directly and indirectly took substantial quantities. Imports from Europe, particularly Germany, had ceased entirely since the war. A long period of price stability prevailed, but the first change in prices since 1932 occurred at the beginning of the fourth quarter, bringing the carlot price up to 11¼c. per pound as compared with 10¾c. per pound at the beginning of the year. Prices in the resale market went as high as 40c. per pound.

A much tighter situation prevailed in various grades of phosphoric acid. The diversion of raw materials, particularly elemental phosphorus for defense purposes, limited production of all phosphates. Prices were advanced during the year by all leading producers.

Sharp price advances occurred during the year for gallic, pyrogallic and tannic acids. Supplies were limited, and higher replacement costs of raw materials prompted sellers to revise prices upward.

A much firmer tone prevailed in the market for all grades of sulphuric acid. In a few instances where prices were below schedules sellers elimated concessions. While considerable talk was heard about higher prices, most sellers were accepting business at firm levels for the early part of 1942. The heavy defense and industrial demands for sulphuric acid kept sellers under pressure to supply all demands. Most sellers were completely booked on current production, and rejected all new business.

Large quantities of nitric acid were absorbed during the year for manufacture of nitro compounds for explosives. With the rapid expansion in military requirements under total war, still greater quantities will be needed for this purpose. The bottleneck in production was the situation in ammonia. However, plans were progressing steadily to increase output of ammonia by the erection of new plants, both private and government owned.

Muriatic was still in a favorable position, but heavy domestic and export requirements kept output moving directly to consuming channels. No immediate shortage was looked for, since recovery methods and raw material supplies were considered adequate for the country's needs.

Insecticides

Business for agricultural insecticides and fungicides increased over the preceding year. The season was prolonged in the Southern Cotton States as the boll weevil infestation in this area was more severe than the previous year. Calcium arsenate experienced one of its best season's in the South.

Record made at cotton insect laboratories of the United States Department of Agriculture indicated that large numbers of boll weevils survived the winter and emerged from hibernation last Spring more than during any recent year.

Concern was felt over drought conditions in this area because of the lack of sufficient rain during May. Crop prospects improved materially during July and tough growing conditions were less favorable in early August. Crop production in the United States was estimated to have exceeded production in any past year, except 1937, according to the United States Bureau of Agriculture. The showery weather in the South resulted in the heaviest infestation of cotton boll weevils since 1932.

Air warfare was waged last year

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in the rough, hilly country of Idaho, Nevada and Oregon to meet the ground offensive against Mormon cricket hordes that threatened to march down from the higher places and attack crops in cultivated valleys. A new poison bait of sodium silicofluoride and bran was spread from a hopper in the plane as it flew over the crickets.

Indications pointed toward an earlier season for most agricultural insecticides and fungicides since consumers were desirous to obtain materials for the new season's requirements as soon as possible to offset any delays in shipments.

In late December, the OPM priorities division issued a preference rating order covering material entering into the production of insecticides and germicides and fungicides for the purpose of facilitating acquisition of material entering into the production or packaging of insecticides and fungicides in the public interest and to promote the national defense.

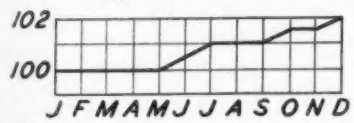
A general firming up of prices was noted throughout the year. Despite some early unsettlement in prices, the situation gradually firmed as the year progressed. Advances occurred in all the arsenicals, with the wider gains made in calcium and lead arsenic schedules.

Coaltar Chemicals

Sales and production of coaltar chemicals reached peak proportions in the year 1941. Increased needs for military purposes and heavy civilian requirements were in excess of production, thereby causing a shortage in a number of chemicals. Despite two interruptions in soft coal operations because of labor strikes, production of by-product coke was maintained at maximum levels throughout the year. The outbreak of war quickened demand for munitions and lease-lend aid to the allies. Additional plant construction was rushed to care for rapidly expanding requirements. During the year, a number of government regulations were enacted, such as priorities, allocations, price stabilization and export control. Upward price adjustment occured in many basic products and intermediates.

Coaltar Chemicals Price Trend Over 1941

(Based on monthly averages for 20 typical materials)



100.0=Dec. 30, 1940-Dec. 29, 1941=102.8

First Quarter

Business experienced renewed activity as the year got under way. Sellers soon began to restrict new business as bookings in a number of basic materials and intermediates were in excess of production, despite the fact that steel operations were at capacity levels, and January steel output broke all previous monthly records. The government was asking for bids on sizable quantities of dinitrotoluene.

In the first quarter, toluol, dimethylanilin, cresylic acids, cresols were placed under the export control. The only price fluctations in this period occured in the hydrogenated solvents which were lowered because of reduced production costs and increased demand.

Second Quarter

A stoppage in soft coal operations had a detrimental effect in April. Inasmuch as steel mills operated on surplus supplies before the soft coal strike was settled, by-product coke stocks declined sharply. Operations were resumed at the end of April.

The heavy requirements for phthalic anhydride for defense and civilian purposes caused a definite shortage in this material. However, a prominent producer announced plans for expanding existing plant facilities. The larger needs for toluol prompted an increase in production from petroleum. After settlement of the coal strike, labor disturbances occurred in widely scattered areas of the industry producing important chemicals. Toward the end of the second quarter cresylic acid and phenol were added to the critical priority list by the Office of Production Management. The trend of prices for the third quarter showed upward tendencies, with contracts covering that period raised in such materials as phenol, petroleum, cresylic acid, anthraquinone, dinitrotoluene, metatoluylenediamine, ortho, mono and trichlorobenzene.

Third Quarter

Production continued at maximum levels in the third quarter, while producers' backlogs were mounting steadily. As defense needs increased, business was prorated in proportion to defense requirements. In August practically all coaltar chemicals were subject to export control except those already placed on the general license list. In September, the OPM issued a regulation to all sellers, manufacturers and distributors to accept defense orders despite delays in normal shipments. Phenols and toluol were added to the full priority control list. As the quarter progressed, still further tightness was evident in tar acid and solvents.

Fourth Quarter

Price revisions occured in tar acid and crude naphthalene at the start of the fourth quarter. Toward the end of October another strike was threatened in the captive coal mines, however, a compromise settlement was made to avert a shortage in coke and a disruption of steel operation. The compromise failed and a strike was called the end of November which lasted more than a week. Finally, by Presidential order, work was resumed in the mines under another compromise agreement.

Expanding defense needs led to further controls and phenol was placed under complete alloaction to be effective December 1. A large part of the phenol was needed to supply Russia under the lease-lend act for military purposes. The outbreak of the war with Japan found the market in a confused state, since defense needs had been taking substantial quantities for several months, but producers were prepared to take care of additional demands for munitions and other defense materials.

In view of the allocations for tar acids, no contracts were taken. However, prices for December were raised for cresols and cresylic acid. Following a request by the OPA to stabilize coaltar solvent prices, contracts were written for benzol, solvent naphtha, toluol and xylol for the first quarter at one cent above previous levels.

By-Product Coke Output

The production of by-product coke in the United States for the first ten months of 1941 amounted to 48,393,673 net tons, compared with 44,346,700 net tons in the corresponding period a year ago.

By-product stocks of coke at producers' plants at end of October, 1941, aggregated 1,615,656 tons, as contrasted with 2,029,395 tons in the like period a year ago.

Coking-coal charged in by-product ovens for the first ten months of 1941 totaled 68,870,961 tons, compared with 62,795,100 tons in the corresponding period of 1940. Coke was produced at eighty-five plants, of which fifty-nine made benzol; fifty-five, toluol; forty-eight, xylol; twenty-eight, naphthalene; eighty-five, tar; seven, creosote oil, and eleven, phenol.

Crude and refined benzol recovered during the first ten months of 1941 totaled 119,844,507 gallons against 108,581,000 gallons in the similar period a year ago. Toluol output for the first ten months totaled 23,926,393 gallons, while crude and refined naphthalene output amounted to 70,032,305 pounds.

Steel Production

Steel production during 1941 was the biggest year in the industry. Output for the year was estimated at 82,800,000 net tons, or 97.2 percent of average capacity available in the year.

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Despite the high level of operations, the industry has seldom been driven to top speed. The lag was explained by the Spring and Fall coal strikes. The current lack of adequate scrap supplies is holding the industry at present levels.

Actual figures for eleven months of 1941 placed output of steel at 75,763,558 tons, outdistancing all previous years, and represented a gain of 25 percent over the 1940 previous high mark. The output was 50 percent more than the 50,467,880 tons produced in the full year 1917, which was the peak of the World War effort of the United States.

Toluol

Direct defense requirements, especially in the manufacture of trinitrotoluene, absorbed a good portion of the available output of toluol. Under present plans production of explosives will be greatly accelerated and the need for toluol increased accordingly. Recovery of toluol from by-product coke operations was at peak levels during the year, and vast strides were made in the recovery of toluol from petroleum. Estimates indicate that the output of toluol from the petroleum industry will add approximately 27,000,000 gallons for defense purposes. Late in the year the OPM placed all toluol in the United States under allocation to become effective February 1, 1942. The use of toluol as a diluent for protective coatings will be entirely prohibited. No exports of toluol were permitted without authorization from the Director of Priorities.

Benzol

A definite strengthening occurred in the market for benzol during the year. An expansion in the use of motor benzol and a broadening in the use of industrial grades absorbed most of the additional output. Export business dropped considerably during the year as a result of the European war.

Xylol

While output of xylol was at capacity and exports declined, a generally tight situation prevailed during most of the year. Production was estimated at approximately 7,000,000 gallons for the year, a substantial gain over 1940. Consumers were switching to petroleum solvents as a suitable substitute.

Prices were advanced one cent per gallon late in the year for benzol, toluol, xylol and solvent naphtha to conform with a request by the OPA to stabilize prices for coaltar solvents. Delivery basis remained the same, with the exception that freight allowance on tanks was limited to 2c. per gallon.

Tar Acids

A scarcity developed in all tar acids as the year progressed. The heavy defense demands, civilian and lease-lend requirements were in excess of available supplies. Late in the year the OPM placed all phenols, including cresylic acids, cresols and tar acid oils under complete allocation. Strict export control was placed on all tar acids earlier in the year. Prices were generally higher.

Estimates of phenol needs were sharply revised during the year. Direct military needs, together with the large quantities going into plastics and dyestuffs by far exceeded available output. Definite plans were made to increase production, but most of the additional output will not be ready until sometime in 1942. Russia was inquiring for substantial quantities in the later part of 1941 for manufacturing picric acid and for other military purposes.

Increasing demands from the resins and disinfectant trades, together with increased government buying, brought a shortage in all grades of cresylic acids. Shipments from Great Britain were fairly well maintained, however, supplies from other sources had been cut off during most of the year. Recovery from petroleum was not sufficient to overcome the greatly expanded demand.

The shortage in cresylic acids was directly reflected in the market for various grades of tar acid oils. The government was a sizeable buyer during the year for disinfectant and cleaning purposes.

Naphthalene

While domestic production of naphthalene showed improvement throughout 1941, the heavier demands absorbed the available output. A large amount went into the production of phthalic anhydride, which in turn was in heavy demand for direct defense purposes. Imports from Europe declined very sharply during the year.

Coaltar Acids

While efforts were underway to expand production of coaltar acids, the general position of the market was tight most of the year. Difficulty in obtaining adequate raw material replacements was a factor in limiting output. Defense needs required substantial quantities of certain acids, and reflected in curtailed shipments to civilian channels. Prices were firm, and underwent few alterations.

Larger quantities of picric acid were needed for military purposes, and expansions were well underway during the year to provide the additional requirements of the government. The expansion in picric acid production permitted sufficient quantities to be used for the manufacture of picramic acid in processing dyestuffs.

Salicylic acid was affected by the difficulty in securing raw materials such as phenol and acetic anhydride. Most sellers were entirely booked ahead on contracts against current production and were unable to accept any new business. Dyestuff manufacturers experienced more dfficulty obtaining supplies of sulphanilic acid principally because of the scarcity of anilin.

Despite efforts to expand production of benzoic acid since the beginning of the war, domestic supplies were not entirely adequate to take care of all inquiries. Before the war, Germany supplied most of the export market, and during the early part of the war this country exported a great deal, however, the tightening in the domestic market greatly limited export business.

Intermediates

The diverting of many intermediates to defense channels brought about dislocations in civilian shipments during the past year. Demand was greatly in excess of available supplies in a number of important items, and sellers, after supplying defense requirements, were forced to allocate available supplies among regular consuming trade. Several restrictions were placed on exports. Prices were generally firm, and some adjustments occurred to take care of increased production costs.

Direct government purchases absorbed large quantities of anilin oil for defense purposes. Substantial amounts went into the production of diphenylamine, which in turn was used as a gun powder stabilizer. This created a scarcity of material available for use in manufacturing various anilin dyes, and supplies were allocated among regular consumers. Domestic production was stepped up during 1941 to care for greatly expanded defense needs.

Chlorinated Compounds

Chlorinated compounds, such as monochlorobenzene, paradichlorobenzene, orthodichlorobenzene and trichlorobenzene, felt the pinch in chlorine supplies. Substantial quantities found their way directly or indirectly, into defense channels. Prices were advanced one cent during the year, while late in the year one producer announced intentions of increasing prices for orthodichlorobenzene and paradichlorobenzene.

Demand for maleic anhydride increased sharply and production was much higher. Many consumers were using maleic anhydride as a substitute for phthalic anhydride in surface coatings.

The situation in anilin oil had a direct reflection on supplies of dimethylanilin. Large quantities were moving to defense channels as a starting point in making tetranitromethylanilin and trinitrophenylmethylnitramine for explosives.

Phthalic Anhydride

Phthalic anhydride was in short supply for the greater part of the year. Producers were considerably behind in their deliveries, and allocated avail-

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able supplies. In May of 1941, plans were formulated to expand output, and by the end of the year the additional production facilities eased the situation to some extent. Further improvement was anticipated during 1942. Substantial quantities were required for processing dibutyl phthalate, which in turn was needed for making smokeless powder. Demand for resins was also very heavy throughout the period, with a number of government specifications calling for an alkyd resin.

Coaltar Colors

The heavy demand for military purposes taxed domestic production of dyestuffs to capacity during most of 1941. The rapid expansion of the armed forces brought forward large orders from virtually every branch of the textile industry. During most of the year, dyestuff manufacturers had been able to supply civilian and defense needs. However, the major problem revolves around the shortage of many raw materials, which seriously threatened the continuous flow of dyes for the processing of government orders and the obligation to regular consuming channels.

Since many chemicals used in making dyestuffs are needed in large quantities for military purposes, the industry found itself in a peculiar position. Toluol, the base material for trinitrotoluene, is also used for processing several intermediates used in turn for making a number of dyestuffs. About 250 important dyestuffs are derived from anilin, which is being substantially diverted to military needs. Phthalic anhydride, an important defense material, is needed for anthraquinone, the basic element of a vast number of dyes.

In contrast to World War I, the dyestuff industry has grown to self-sufficiency in this country. American-made dyes in 1913 amounted to $3,000,000 and imports totaled $13,000,000. Today, imports have slumped to negligible proportions, while domestic output was estimated at approximately $25,000,000.

Dyestuffs, Textile and Leather Chemicals

A broad buying interest characterized business in the market for dyestuffs, textile and leather chemicals throughout the past year. Requirements were heavy in the leather and textile consuming lines as the result of increased civilian and defense orders. A number of shortages occurred because of the priority in defense needs utilizing a substantial proportion of the production, and the lack of shipping facilities to bring needed imported materials. Consumers resorted to substitute materials to offset the lack of supplies in regular lines. Further uncertainty was created by outbreak of war in the Pacific late in the year. The price trend was upward in a number of items as replacement costs, such as freight rates, and war risk insurance mounted.

The year started with an active inquiry for materials, with operations at high levels in all consuming lines. A great deal of apprehension prevailed about obtaining adequate supplies from the Far East. The shortage of shipping space was beginning to be felt, and virtually all imported items, such as cutch, tapioca, sago, wattle bark, gambier and quebracho, were higher. Egg products started to move upward and the government purchased large quantities for the Federal Surplus Commodity Corporation. A firmness was evident in corn derivatives. Zinc dust was placed under export control.

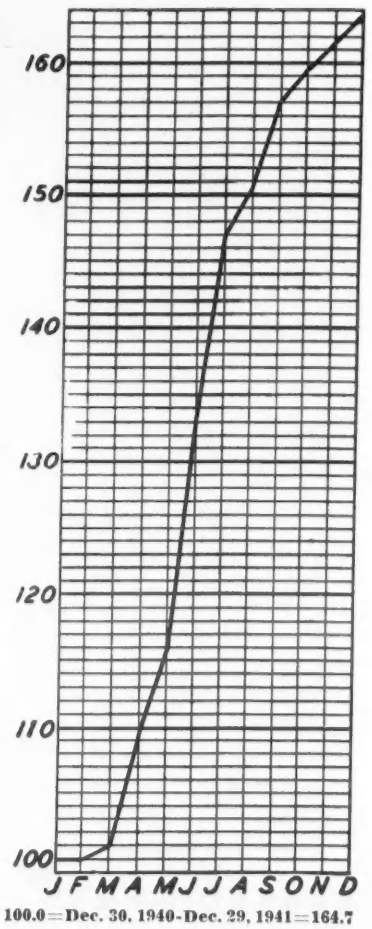
Shortly after the second quarter started, quotations for myrobalans were withdrawn because of the inability to obtain cargo space for shipment from India. Egg products advance was steady under government purchasing. The price trend was definitely upward in a number of materials, because of the rising raw material, commodity and shipping costs. Contract prices for bichromates and prussiates were advanced, while natural dyewood extracts were raised because of higher shipping costs. Shipments of sago and tapioca flour were restricted from the Far East, and demand for corn derivatives increased because of government buying and the switching over by consumers to corn starch as substitutes for tapioca and sago flour.

A tightening of supplies was evident in the third quarter. One producer limited production of alumina acetate and prices for the powder and solution were raised. Advances occurred in the prices for spruce extract and quebracho, while most starches were higher. The OPM issued an order restricting the use of chromium, limiting the amount going into the production of chromates. Far East shipments were further affected by limited cargo space. Egg products were cut off from the Far East. Meanwhile, the OPM announces the first of a series of projects to increase domestic production of dried eggs from 12,000,000 pounds to 100,000,000 pounds.

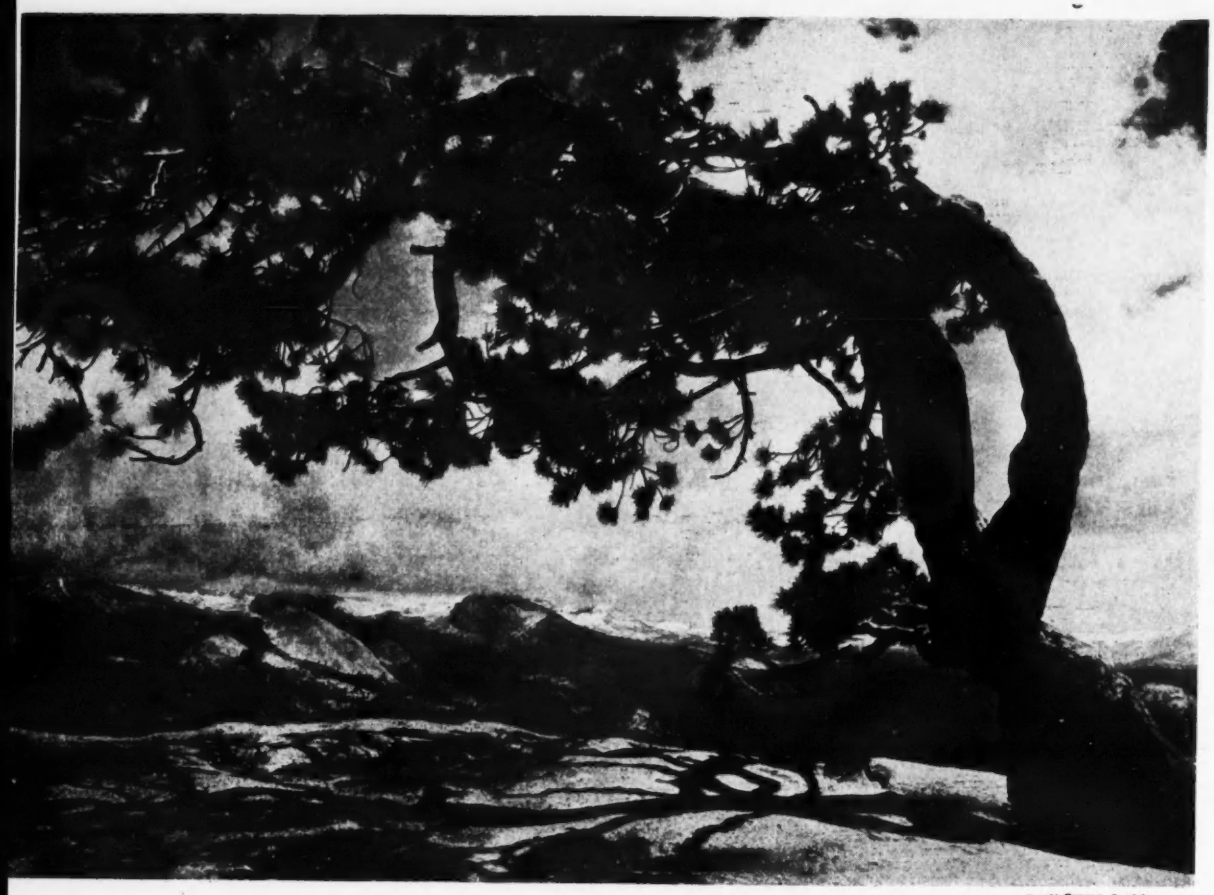
Some improvements occurred in the shipments of sago and tapioca flour at the beginning of the fourth quar-

Dyestuffs, Textile and Leather Chemicals Price Trend Over 1941

(Based on monthly averages for 19 typical materials)



100.0=Dec. 30, 1940-Dec. 29, 1941=164.7



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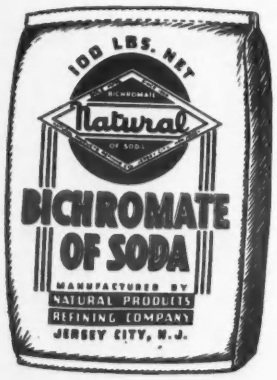

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ter. Government continued to make heavy purchases of egg products and corn starch under the lend-lease act. The enactment of the Argentine trade agreement cut the tariff on quebracho extract in half.

Prices were advanced twice for blood albumen, and buying was very heavy for civilian and defense purposes. One seller withdrew prices entirely for myrobalan extract because of the raw material situation. A tighter situation occurred in super spruce extract and prices were higher. Contract prices were renewed for bichromates, prussiates, natural dyewood extracts, quebracho and wattle extract for the early part of next year. Gambier was very scarce as unfavorable weather conditions and lack of shipping space restricted imports. The declaration of war by Japan on this country further complicated imports and shipments were seriously threatened in the Pacific. A sharp advance took place in war risk insurance rates on all flag ships, especially sailings to the Far East.

Chemicals

As the year progressed, supplies of virtually all textile and leather chemicals tightened. This reflected an unusual demand from mills working on defense orders as well as the broader demand for export. Supplies of raw materials was another factor in limiting production. The situation in acetic acid reflected in a shortening of supplies for acetate salts such as alumina acetate.

The OPM issued an order restricting use of chromium, limiting the amounts going into the production of chromates to the average monthly consumption over the twelve months through June, 1941. Prussiates were in tight supply, imports of the potash prussiate were practically cut off entirely, while domestic production was usually limited to regular consuming channels for normal needs. Zinc dust was placed on a ceiling basis following price stabilization in the basic metal. Price trend in all chemicals was moderately higher.

Dyestuffs

Most of the natural dyestuffs were not affected too much by shipping difficulties because the majority came from territories further removed from actual hostilities. However, shipping costs and freight rates were instrumental in bringing about a generally higher price trend for such materials as fustic, hypernic, hematine, logwood, quercitron and osage orange. A good buying interest prevailed during the year, with only a slight leveling off noted toward the end of the period.

Sizing Materials

The steady rise in egg products featured the market for sizing materials throughout the year. Since the start of 1941 prices began to rise. The decline in the imports from the Far East coupled with the heavy government buying were factors in tightening the market. Plans toward the end of the year were well underway to materially increase domestic output to take care of all domestic and export needs.

Corn derivatives, particularly corn starch, were in active demand. Government was buying large quantities of corn starch under the lend-lease act, while the shortage in sago and tapioca flour in the beginning of the year caused some switching to corn starch as a suitable substitute. Shipments of sago and tapioca were limited during the early part of the year because of inadequate shipping facilities, while the situation improved later, the latest war developments again seriously threatened future shipments from Java.

Blood albumen was in a tight position reflecting the cessation in imported material and the heavy defense requirements. Demand for various starches was well sustained, and domestic production took up some of the lag in imported materials.

Tanning Materials

Activity in the leather industry kept demand for all tanning materials and extracts at abnormal levels. The cutting off of some materials such as myrobalans, valonia and sumac placed a burden on the market for substitute materials. Quebracho shipments were satisfactory from South America and buying was very broad during the year.

The enactment of the Argentine trade agreement cut the tariff on quebracho extract in half. Spruce extract experienced an unusually heavy demand, and situation was very tight for some grades. While imports of cutch from Borneo held at favorable levels during the year, the outbreak of hostilities in the Far East seriously threatened future replacements.

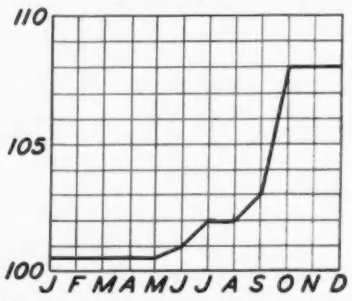
Supplies of myrobalans were stopped earlier in the year and later prices for the extract were withdrawn. Spot stocks of gambier were negligible because of adverse growing conditions and limited shipping space. Demand for chestnut bark extract was at high levels, while shortages occurred in hemlock and oakbark extracts, with one seller not quoting prices for the first quarter of 1942. The price trend in all raw tanning materials and extracts was upward because of the rising freight and insurance rates.

Paint, Varnish, and Lacquer Materials

Lack of raw materials, insufficient plant equipment and priorities were the principal headaches in the paint, varnish and lacquer industry during 1941. Despite the fact that the industry continually was being thrown off its normal course by the dislocations occasioned by war, output of paint products during the year, however, reached exceptionally high levels. But the increased production was not adequate to meet the skyrocketing demand and the ever-tightening supply situation reflected the priorities imposed on a growing list of materials needed for defense.

Paint, Varnish and Lacquer Materials Price Trend Over 1941

(Based on monthly averages for 11 typical materials)



100.0=Dec. 30, 1940-Dec. 29, 1941=108.2

In the Autumn the construction industry felt the pinch of supplies used extensively in the defense program and the Supply Priorities and Allocation Board banned all construction, both public and private, which used critical defense materials, unless such buildings were essential to public health and safety. Also, the Office of Production Management cut the automobile output. The declines in the use of paint which would have resulted from these orders, however, were offset by increased requirements of the Army, Navy and defense industries.

Faced by curtailed use of materials they ordinarily employed, many paint manufacturers anxiously sought substitute material, which proved adequate in many instances but caused shortages in those substitutes.

Metallic Lead and Zinc

Among the first products to feel the effects of the greatly increased demand were pig lead and slab zinc. As early as February stocks of lead were at such a low level large quantities of foreign lead had to be used. On March 15 the metal was placed on the export control list but even this action failed to relieve the situation to any marked degree.

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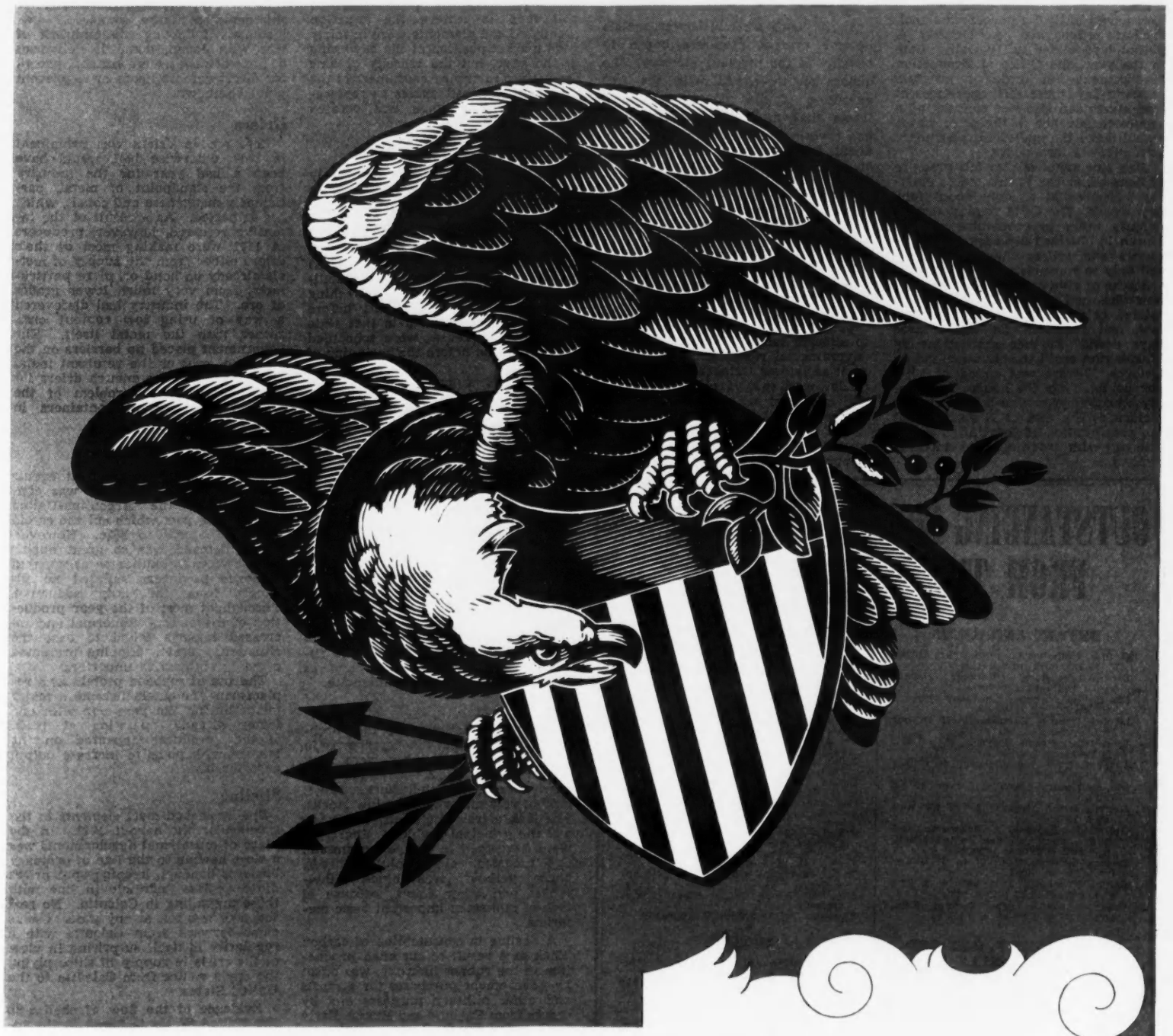

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Sharp advances were being made in lead prices until the government took further action, and, on October 4, placed lead under full priority. Late in the year, the Office of Production Management was urging a program of seven-day, three-shift operations at lead mines and also was considering a requested advance in the price which would make the operations plan more attractive to producers.

Slab zinc supplies also felt pressure of demand, stocks at the end of January being equal to only about four days needs. The OPM requested non-defense users to economize and on March 15 obtained a pledge from producers and sellers that they would sell only to consumers and processors.

Stocks of zinc continued to dwindle, however, and at the end of March totaled only 6,969 tons, a thirty-year low, and sufficient for about three days needs. Further restrictions by Washington eased the situation and on October 13 zinc was ceiled at 8¼c. per pound, f.o.b. St. Louis. The supply situation presented a much better picture at the end of November but the precipitation of the United States into war with Japan again clouded the horizon.

Pigments

As the needs for non-ferrous metals became evident problems began to develop in the pigment industry. The dislocation interfered with the full execution of the requirements contracts that most consumers usually had covering their estimated pigments needs. In the early months of the year an unprecedented demand was witnessed. By the end of the year production had been stepped up to such a level that sales for 1941 probably were the highest on record. Shipments included not only current production but practically all of the inventory and stocks on hand in distribution centers.

Zinc and titanium pigments were among the first to feel the pinch and suppliers wisely took immediate steps to allocate sales. In this way, direct governmental regulation was avoided until as late as October 4, when zinc oxides were placed on full priority, and still later when the government ordered official allocation of titaniums.

The shortage of titanium pigments prompted one of the largest producers to open known but untapped resources in the Adirondacks, output of which will tend to relieve the situation greatly. Lead pigments were in fairly good market position at the beginning of the year, but the scarcity of zinc derivatives prompted consumers of the latter to seek lead oxides as replacement. Thus tightness was created there.

Inert Pigments and Fillers

The inert pigments were the only ones not seriously involved during the year by raw materials priorities, with asbestine and blanc fixe the exceptions. With increased consumption of rubber and paint for defense purposes, the demand for barytes prompted rapid expansion of production facilities. In addition to six barite-washing plants operating in Missouri before 1941, eleven new plants in that state and one in Arkansas were scheduled for completion before the beginning of 1942.

In the field of ground mica probably the most significant development was the utilization of sericite from South Carolina. Of national defense interest was the possibility that it can be used to replace a substantial part of zinc oxide used in rubber. It was being tested last year in tire manufacture, which ordinarily dissipates 60,000 tons or more of zinc oxide annually.

The new material, which requires only light disintegration to produce a minus 325-mesh product, was used mainly for casein paint. It was claimed to be better than ordinary water-ground mica in varnishes and certain other protective coverings, because it lacked sheen while retaining the fish-scale form, which is one of the superior properties of wet-ground as compared to dry-ground muscovite.

Dry Colors

Dry colors statistics for 1941 probably will show that the experiences in that end of the industry were very similar to pigments:—increased production, heavy demand, short supplies, lack of raw materials and low stocks. The lack of raw materials, of course, was the principal problem. Shortages were developed in chrome, cadmium, and tungsten colors, toluidine reds, hansa yellows, iron blues, litholrubine and other colors, because of lack of numerous important basic materials.

A decline in consumption of carbon black as a result of curtailed production in the rubber industry, was offset by government purchases for airports and other military purposes and by orders from England and Russia. Early in the year gas black prices had been raised to the highest level in three years. Still later, another advance was made, despite OPA attempts to prevent it. In the Spring this black, along with cadmium and chrome colors, was placed on the export control list.

At mid-year prices on virtually all chemical and earth colors were raised and the chemical types moved higher again in September. In December, however, they were stabilized at their October 1 levels by the OPA, with the majority of earth color suppliers indicating their intention to follow the same policy. A feature of the year was the appearance on the market of blackout and camouflage paints.

Synthetic Resins

Stringency of supplies probably was more serious in the synthetic resins branch of the industry than in any other. As usual, the problem was one of securing the raw materials essential to the manufacture of the resins. The absence of sufficient supplies of fast-drying oils and the speed required for finishing various products in the present emergency resulted in larger demands for ester gum, oleoresinous varnishes, nitrocellulose lacquers, phenol-formaldehyde, alkyd and urea-formaldehyde resins.

Varnish Gums

With supplies of these virtually exhausted many varnish manufacturers revived old methods and began to run varnish with natural resins. The increased demand for the varnish gums began to drain supplies in this country, despite the fact that imports were increased greatly. Coupled with this, lack of adequate shipping space from primary centers plagued suppliers until negotiations between the United States and Netherlands East Indies government assured regular shipments of large tonnages. Immediately following the outbreak of war with Japan, domestic deliveries of natural resins were banned, except for direct defense needs or to prevent plant shutdown.

Driers

Research in driers was prominent in 1940, otherwise 1941 would have been a bad year for the industry from the standpoint of metal, particularly manganese and cobalt, which are imported. As a result of the intensive research, however, producers in 1941 were making most of their driers either from the supply of metals already on hand or, more particularly, from very much lower grades of ore. The industry had discovered a way of using low content ores, rather than the metal itself. The government placed no barriers on the supply of ores or the resultant metal and thus there was enough driers for 1941. The biggest problem of the year was to obtain containers in which to ship the driers.

Casein

One of the most important events of 1941, insofar as casein was concerned, was the Argentine-United States trade pact which cut the casein duty 50 percent to 2¾c. However, casein demand was so great during the year, and supplies so short, that domestic producers suffered no ill-effects from the duty reduction. Throughout most of the year production of casein was subnormal and increased imports failed to ease the situation. Again, shipping presented a major problem to importers.

The use of soybean protein as a replacement for casein became a major factor during the year and with one factor already operating at peak, another producer appeared on the market with plans to increase output considerably.

Shellac

Shellac lacked most elements of the spectacular throughout 1941. In the place of sensational developments was a close hewing to the line of ordinary business conduct, keeping spot prices more or less definitely in line with those prevailing in Calcutta. No real shortage was felt at any time. Goods came forward from Calcutta with a regularity in itself surprising in view of the crisis in supply of ships plying the trade routes from Calcutta to the United States.

Evidence of the flow of shellac to the United States is found in the report of the Department of Commerce for the period January-September, 1941, with those for the corresponding period in 1940 in comparison.

Imports of unbleached shellac for the nine months in 1941 totaled 29,971,848 pounds; in 1940, it was 25,168,316 pounds. Imports of seedlac in the 1941 period were 22,552,636 pounds against the 1940 period arrivals of 14,703,762 pounds. No bleached shellac reached here in 1941 while in 1940 the total to the end of September was 1,640 pounds.

It is thus recorded that the imports of seedlac in the 1941 period were 7,848,874 pounds over those of 1940, while those of unbleached shellac gained 4,803,532 pounds. In view of fact that ships were scarcer, the local importers of shellac managed to keep not only their normal requirements moving to the spot but also to increase them substantially over those in nine months of 1940. In fact, the nine month imports of 1941 were but 18,365 pounds less than the twelve month arrival in 1940, while the nine month imports of seedlac in 1941 was actually 2,433,643 pounds more than the total imported in all of 1940.

Of course, the constant renewal of stocks took place at rising prices in Calcutta and increasing costs in the form of freight rates, marine insurance, war risk insurance and the like. In fact, in order to get the shellac here, importers were forced to pay the extremely high ocean freight rates commanded under private charter as against those rates quoted by the conference lines.

This added vastly to the net laid down cost of shellac in United States ports and in no small part accounted for the advance in spot prices during the year. While there appeared to be some speculative activity in the Calcutta market, its presence was scented

OUTSTANDING EQUIPMENT OFFERINGS FROM THE FMC STOCK

DRYERS AND KILNS

Buffalo Foundry Vacuum Drum Dryer 5′ x 12′ with auxiliaries.
Devine Vacuum Chamber Dryer; 96″ x 156″; 12 shelves.
(2) Devine Vacuum Chamber Dryers; 40″ x 42″; 12 shelves.
Devine 5′ x 4′ Vacuum Shelf Dryer; 12 shelves.
Louisville Steam Dryer; 4′ x 25′; fourteen 4½″ tubes.
4 G. & H. Steam Dryers; 6′ x 26′; fifty 4½″ tubes.
Stokes Rotary Vacuum Dryer 30″ x 12′.
Double Drum Dryers; 28″ x 60″ and 20″ x 72″.
Gehnrich, Proctor & Schwartz and other steam and gas heated truck, tray and conveyor dryers.
Rotary Dryers: from 3′ to 6′ Dia.—from 20′ to 60′ L.
Kilns; 2′ x 18′; 5′ x 30′; 6′ x 30′; 6′ x 60′; 6′ x 76′; 7′ x 118′.
Dressler Muffle type Tunnel Kiln. 10′6″ W. x 8′6″ H. x 150′ L.

BALL, PEBBLE, ROD AND TUBE MILLS

Alsing 30″, 36″ and 72″ Porcelain Lined Pebble Mills.
Thropp Silex Lined Pebble Mill 7′ x 6′.
Hardinge Conical Mill 6′; buhrstone lined.
Krupp Lehigh No. 4 Steel Lined Ball Mill; 4′ 1″ x 4′.
Patterson Manganese Lined Ball Mill 5′ x 5′ 6″.
Continuous Steel Ball Mill 5′ x 8′.
Vulcan 3 compartment 5′ x 36′ Tube Mill.
Marcy No. 32 Rod Mill.
Patterson 24″ x 42″ Unlined Jacketed Tube Mill.

JACKETED KETTLES AND TANKS

Steel Jacketed Kettles, all capacities.
Copper Jacketed Kettles 30 gal. to 600 gal.
Aluminum Jacketed Kettles 30 gal. to 300 gal.
Stainless Steel Kettles 60 gal. to 250 gal.
5′ x 10′ Jacketed Agitated Steel Tanks.
Three 300 gal. Glass Lined Jacketed and Agitated Kettles.
Two 1,000 gal. Jacketed Glass Lined Tanks.

RUBBER AND PLASTIC EQUIPMENT

Injection Molding Units
1 Hydraulic P. M. Co. 100 ton 12 oz. press.
1 Hydraulic P. M. Co. 500 ton 36 oz. press.
1 Reed Prentice 10 c 4 oz. press.
1 Reed Prentice 10 D 4 oz. press.
1 Lester 6 oz. press.
2 Farrell Birmingham 3 Roll Rubber Mill.
1 Triple Unit 2 Roll Refining Line.
15″ x 15″ Watson Stillman Hydraulic Press.

FILTER PRESSES & FILTERS

Sperry 18″ x 18″ Hard Rubber Filter Press.
Sperry 20″ x 20″ Bronze 10 chamber.
Shriver 24″ x 24″ 40 chamber 4-eyed press.
Shriver 30″ x 30″ 42 chamber press.
Shriver 36″ x 36″ 38 chamber press.
Sperry 42″ x 42″ 57 plate center feed.
Sweetland Filters, 1, 2, 5, 7 and 10.
Feinc Rotary Vacuum Filter 4′6″ x 6′.
No. 456 Kelly Filter 4′ x 12′ cylinder; 10 frames, 5″ centers.
150 Other Filters and Filter Presses.

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Copper Jacketed Vacuum Pan 28″ x 44″.
Copper Jacketed Vacuum Pan 36″ x 55″.
Copper Vacuum Pan; Coil Heated; 5′ x 10′, with Jet Condenser, connections, etc.
2 Pfaudler 500 gal. Glass Lined Agitated Vac. Pans.
3 five foot and one six foot Copper Jacketed Vacuum Pans.
Copper Coil Heated Still, agitated, 6′ Dia. x 5′10″ Ht.
Complete Copper Still with Evaporator, Vapor Catch, Condenser, etc.
Pfaudler 250 gal. Lead Lined Jacketed Vacuum Still.
Complete Stock of Still Pots and Distillation Installations.
Buffalo Foundry Double Effect Evaporator.
Struthers Wells Triple Effect Evaporator.
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Large Steel Dry Mixers up to 3,000 lbs.
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4 1,000 lb. Heavy Duty Jacketed Mixers.
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Rubber Coated Extractor 36″ center slung.
American and Troy Extractors 18″ to 48″.
Sharples No. 6 M4 PIT type steel bowl.
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Raymond Pulverizers No. 0 to No. 0000.
Sprout Waldron 24″ and 36″ Attrition Mills.
Raymond 3 Roll High Side Mills.
FMC Rotary Cutters, all sizes.
Stedman No. 26 Cage Mill.
Meade Mills Nos. 1 and 2.
FMC D 80 Hammer Mills.
Falcon WB Hammermill 6 screens.
Hercules Grinder.
Micro Pulverizers Bantam and No. 1.

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In this fight you have a strong ally who is producing the ammunition with which you can wage a victorious campaign. He is the farmer of Kenya, British East Africa, who has increased his production of the finest pyrethrum, and is shipping it to you in ever-increasing volume.

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by the New York importers and led to prompt registration of protest with the Calcutta authorities and demand for relief was followed by a more stable situation that appeared to give evidence of some curb on uncontrolled speculation at the source.

The advance in spot prices on T.N. and superfine shellac was 17c. per pound over the entire year. Bonedry shellac rose 13c. per pound and other gradings of shellac were proportionately advanced.

Toward the end of the year, shellac cutters ran into a very tight situation in the matter of shellac solvents. Deliveries from the producers virtually stopped and it was clear that first quarter 1942 solvents would be available in restricted fashion and only at substantially higher cost to the cutters.

Lacquer Materials

Heavy defense demands absorbed considerable quantities of lacquer materials and solvents during the past year. The situation was further accentuated by the declaration of war by the United States in the final month of the year. Several control measures were issued by the government in an effort to direct shipments to defense channels, with consumers in non-defense industries finding it increasingly difficult to obtain supplies. Some efforts were made to establish a barter system to overcome shortages in certain essential materials. Price trend was upward throughout the year, and ceilings were established on certain materials by the Office of Price Administration.

The ever-shifting war and defense developments affected raw material supplies, manufacturing methods and distributive processes. As defense and lease-lend needs became greater the trend toward allocations increased. Situation in chlorine clouded the picture for ethyleneglycol and for a number of other compounds using chlorine as a base material. Acetate esters were affected by shortages in acetic acid, since supplies of carbide limited production. Shortages in phthalic anhydride and napthalene were reflected in dibutyl phthalate.

Plans for increasing production were well advanced by the end of the year. However, most of the increased production was expected to find its way directly into defense channels, and give little immediate relief to civilian consumers. More capacity was planned for acetic acid, acetone, isopropyl alcohol, methylethyl ketone and dibutyl phthalate.

Prices began to rise steadily after the first six months of the year. As a result of the increases made in the fourth quarter prices, the OPA issued a warning that prices be held at the third quarter levels. As of October 27, price ceilings were announced for acetone and butyl alcohol. This nullified previous price advances for the most part. However, near the end of the year the OPA amended its previous price provisions because of the sharp advance in raw material costs, particularly molasses, in an effort to expand production facilities of all leading producers.

Ceilings were sharply higher for acetone and butyl alcohol, but this led to considerable confusion among various producers in efforts to adjust price schedules to conform with the government's request. The new prices issued at the end of the year showed wide disparity in quotations, some were at maximum levels, while others recorded only moderate revisions.

Acetates

The scarcity of acetic acid seriously impeded production of various acetates. While production was increased, the new output was not sufficient to meet industrial requirements. Ethyl acetate, amyl acetate, normal butyl and secondary butyl acetate supplies were insufficient to take care of domestic needs. Steps were taken to curtail the use of acetic acid in the manufacture of cellulose acetate which is utilized in the manufacture of artificial silk for civilian consumption.

Acetone production facilities were broadened considerably, with output estimated at approximately 180,000,000 pounds which was to be expanded by at least 60,000,000 pounds, resulting in current production being raised to 240,000,000 pounds.

A definite shortage prevailed in methylethyl ketone throughout most of the year. Monthly production was stepped up sharply from 500,000 gallons to approximately 700,000 gallons, but this was believed to be short of defense and civilian requirements. Some relief was expected to materialize when the situation in ethyl acetate was improved, since it may be used in many instances in place of methylethyl ketone.

Plasticizers

An extremely scarce situation prevailed in various phthalates including dibutyl, diethyl, dimethyl and diamyl phthalate. The shortage in phthalic anhydride was one of the principal factors in limiting production, but some improvement was underway later in the year.

Practically all of the dibutyl phthlate produced was moving directly to defense channels. It was said that millions of pounds of dibutyl phthalate would be required for coating smokeless powder.

Tricresyl phosphate was in short supply. The scarcity of cresylic acids had a direct effect on supplies. Since production of cresylic acids are necessarily limited, the chances for rapid improvement in the situation were not nearly as bright as other plasticizers.

Cellulose Compounds

Demand for cellulose compounds from the lacquer industry was greatly stimulated because many lacquer manufacturers formerly using other quick-drying formulations were changing, in view of the scarcity and inability to obtain necessary materials. One of the leading producers of nitrocellulose announced to contract customers that only a definite quantity of material would be available for consumption, and allocated equal monthly quantities over the balance of the year. It was explained that production was limited, and the prospects of expanding output would necessarily depend on securing adequate supplies of nitric acid.

Naval Stores

Developments in the markets for naval stores during 1941 were mainly of an encouraging nature from the viewpoint of producers, and at the close of the year prevailing sentiment in all branches of the industry was optimistic regarding the outlook for 1942. This feeling was especially traceable to a material decrease in stocks of gum rosin in all parts of the country, the shrinkage in supplies being very sharp during the third quarter of the calendar year when purchases by the government for export to Britain under the provisions of the lend-lease act were decidedly heavy.

In addition to purchases of rosin in the open market, the government took large quantities from its holdings acquired through loans to producers, and stocks of the latter rosins at the close of the year were down to 800,000 barrels and drums, showing a decrease during the final quarter of the calendar year of 212,000 packages.

The government's purchases for export, however, were not limited to gum rosin. Large quantities of wood rosin were also taken by the government and to these purchases were added large lots of gum and wood turpentine as well as pine oil and other pine products. Before the close of the year the government's holdings of gum turpentine under loans to producers had disappeared. In the case of wood rosin and turpentine there was a shortage of spot supplies at times during the year largely as a result of the government purchases.

Domestic consumption during 1941 proved to be larger than had been estimated at the opening of the naval stores season, as indications were not very clear at that time that the defense program would expand at the rate witnessed later in the year, and which became much more noticeable after the outbreak of hostilities in the Pacific.

The expansion in domestic consumption was greatest in the case of rosin but demand for all other pine products was also stimulated materially by the defense program, with the indications pointing to a further important expansion in the requirements of domestic consumers during 1942.

Turpentine, Rosin Prices

The upshot of this expanding consumption, together with the large gov-

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This is extremely important in view of the present tight condition in Chinawood oil, Perilla oil, and Oiticica oil.

CASTUNG 103 — a new special oil, has improved reactive properties as compared to other dehydrated castor oils.

CASTUNG 103 — has the highest solvent power for the most difficultly soluble resins.

CASTUNG 103 — when manipulated as directed, will produce a varnish with a faster dry and better water resistance than when a bodied dehydrated castor oil is used.

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ernment purchases for export, was a material advance in prices, the tendency being upward much of the time during the year although there were frequent twists and turns, depending upon the extent of domestic purchases and the publication of news concerning the operations in the markets here and in the South for government account.

The top price of the year for turpentine was reached in August when the market touched 87½c. per gallon, ex-dock, New York. At this level demand slacked and the market experienced occasional recessions which carried the price down in December to 78½c. per gallon. This figure compared with 44c. per gallon in December, 1940.

Rosin prices at the close of 1941 were at the highest point recorded during the year, F grade being quoted at $3.59 per 100 pounds, ex-dock, New York, while WW was quoted at $4.57 per 100 pounds. These prices compared with $1.97 and $3.30 respectively at the close of 1940.

Late last year the government announced a new schedule of loans to producers of rosin and turpentine. These new loan values became effective on January 1, 1942, and raised the rate on turpentine from 30 cents to 55 cents per gallon, while rosin loan values were increased to a range of $2.80 to $3.25 per 100 pounds, according to grade, showing an advance on the average of 50 cents per 100 pounds.

This action on the part of the government was reflected in increased purchases of rosin and by a very noticeable strengthening of sentiment in all branches of the industry, especially as rosin loans during 1942 will be made on a net basis, which eliminates all government deductions for interest and carrying charges.

Gum Loan Program

Another important feature of the loan policy for 1942 is that producers will be permitted to carry rosins eligible for loans into 1943, if they so desire because of unfavorable market developments at any time during the naval stores year ended with March, 1943, or on the other hand, in the case of an advance in open market prices they will have the privilege of withdrawing rosin under loans and disposing of it at the open market price by paying to the government the loan value plus accrued interest and carrying charges.

Statistics covering production of naval stores for the season which commenced April 1, 1941, and extends to March 31, 1942, will not be available until next May.

During the first half of the season ended with September last the production of gum turpentine in the United States was 194,915 barrels while the output of wood turpentine was 112,258 barrels. These figures compare with 247,497 and 102,695 barrels respectively in the previous season. Production of gum rosin in the first half of the 1941-1942 naval stores season was 662,417 barrels against 819,992 barrels in the same time in the previous season, while the output of wood rosin was 304,797 barrels against 476,127 barrels.

Stocks of gum turpentine at the close of September last were 124,994 barrels against 198,330 barrels on the same date in the previous season, while stocks of wood turpentine were 45,033 barrels against 49,209 barrels. Stocks of gum rosin at the close of September last were 1,623,693 barrels against 1,650,137 a year earlier, while stocks of wood rosin on September 30 were 161,135 barrels against 188,808 barrels.

Rosin Stocks

In the case of gum rosin, as already pointed out, stocks decreased rapidly during the final quarter of the calendar year and at the close of December were much smaller everywhere than at the end of 1940, the supply at Savannah now being about 150,000 barrels less than a year ago.

With consumption of rosin, turpentine and other pine products large and steadily growing and with the indications apparently pointing to liberal exports during 1942, estimates as to production requirements during the coming season are being revised upward.

Secretary of Agriculture Claude R. Wickard, in announcing a farm program for 1942, called for an increase in production of rosin and turpentine of 40 percent as compared with the current season.

It is now contended in some branches of the industry, however, that such an increase would not prove adequate for the requirements of domestic consumers and the indicated export needs and that plans should be made for an increase in production of fully 50 percent or more, though it is conceded that the labor situation in the South may prevent an increase of the extent planned.

A growing shortage of suitable labor has been noted in the South in recent months and this situation may become more serious before the new naval stores season opens, it is feared, as a result of the war and the drafting of men for military purposes.

Drugs and Fine Chemicals

Drugs and fine chemicals in December completed a year in which demand expanded steadily and raw materials became increasingly difficult to obtain. In the main, leading manufacturers pursued a policy that, in the matter of price changes, was conservative to a rather surprising extent. They also strove to prevent their products getting into the hands fo speculators in any major way.

Regular customers got first call on supplies and the orders of such buyers were scrutinized closely for indications that the buyers were attempting to get more than a reasonable amount of merchandise; the quantities were kept down to a basis arrived at by a study of past purchases to which was added a reasonable amount of goods to cover normal increases in actual requirements.

Before the year was ended, something akin to rationing of supplies was in effect and orders submitted stood an excellent chance of being automatically pared down that deliveries be kept within the narrowing limits for civilian supplies, narrowed for the purpose of assuring success to the broader plans of the Federal government that, first, undertook to expand the defense establishment and, second, following the Japanese attack at Pearl Harbor at dawn on December 7, began to build a military machine whose offensive strength ultimately was expected to bring victory to what President Roosevelt described as the United Nations, numbering twenty-six fighting against Japan, Germany and Italy.

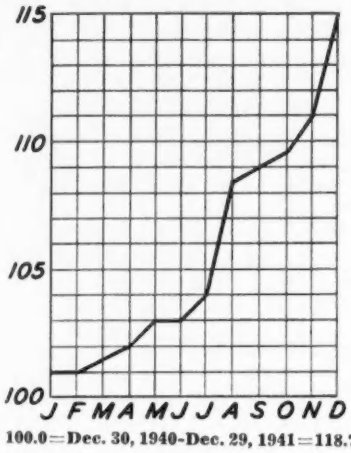
Consumer purchasing power lifted retail volume to a peak estimated to be in excess of $1,700,000,000 and government purchases of drugs and pharmaceuticals for the armed forces, and for lend-lease shipments pushed manufacturers' and wholesalers' sales to record high levels.

Production of drugs rose steadily throughout the year and by the final quarter of that period, employment in factories was at least 24 percent above the previous year's decade-high levels. By December, prices of drugs and fine chemicals were up about 17 percent over the previous year.

Raw materials were an increasing problem throughout the twelve months. As the nation turned from peace, to defense, to war, quicksilver, alcohol, methanol, argols, opium, cin-

Drugs and Fine Chemicals Price Trend Over 1941

(Based on monthly averages for 35 typical materials)



100.0=Dec. 30, 1940-Dec. 29, 1941=118.7

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RAW MATERIALS, OILS & CHEMICALS

HANNA BUILDING

Cleveland

January 12, 1942

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Throughout the United States

Gentlemen:—

For the past four months we have been running an exchange bureau for the paint, chemical and rubber industries.

Our bulletins go out every week and if you are not on our list for exchange of materials, write us immediately.

This bureau of exchange or barter has met with general approval from a list of over 2200 to whom these bulletins are being sent. We also run in these bulletins, where the trade do not wish or have anything for exchange, a column for outright sale and outright buying of various materials.

In the establishment of this service, we know from experience and letters we have received that we are doing a constructive job.

PLEASE CONTINUE TO SEND US MATERIALS FOR EXCHANGE AND WHAT YOU CAN FURNISH IN EXCHANGE. ALSO ANY MATERIALS YOU WISH TO PURCHASE OR SELL OUTRIGHT.

Yours very truly,

SMEAD & SMALL, Inc.

E. R. Smead

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Uniformity

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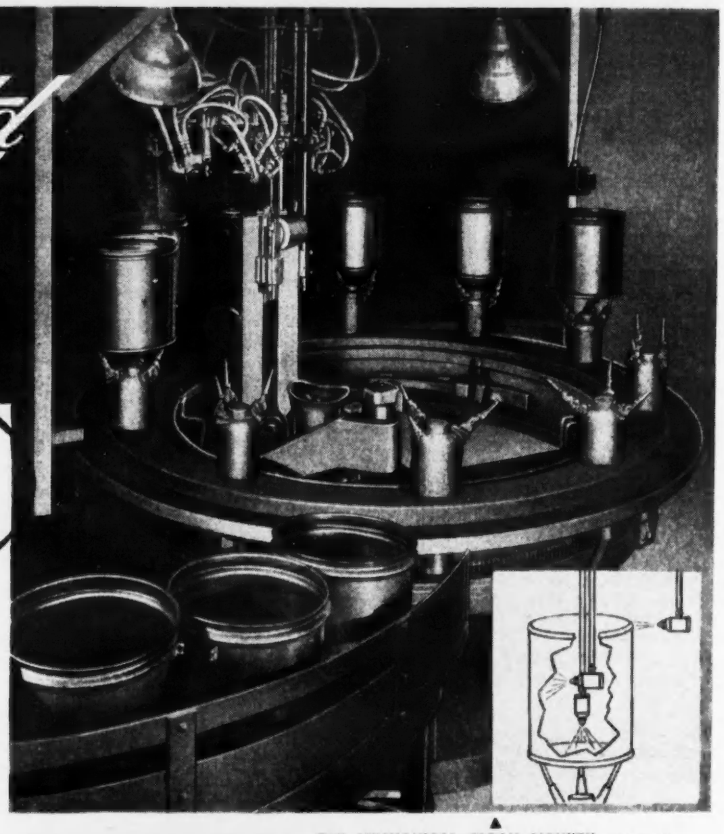
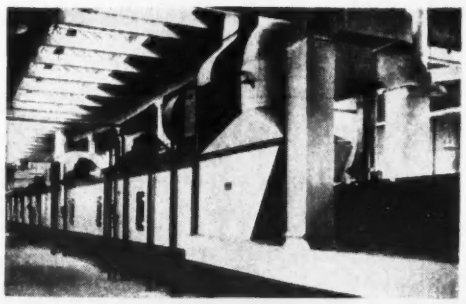
THE uniformity of Steri Seald Containers is the result of the complete, accurate control that marks their manufacture. Every step of construction has been refined to an automatic, precision operation—and every operation is guided by controlling instruments of the most modern type. Recordings from these instruments, showing the time spent by each container in the baking ovens, oven temperatures, and other contributing factors, are then checked in the laboratory, to be sure that specifications have been fulfilled to the letter.

Coupled with the extensive facilities of the Wilson & Bennett laboratory—the largest of its kind—this carefully controlled uniformity of Steri Seald Containers provides the most complete product protection that modern science can offer.



▲ THE MECHANICAL SPRAY MONKEY—an automatic spray unit—designed, developed and used exclusively by Wilson & Bennett. This machine moves each container into position under a battery of three spray nozzles, then whirls the container rapidly around while nozzles are lowered to spray side, bottom and rim with a uniform coating of any desired thickness.

▲ • Typical of the scientific control that marks Steri Seald production are these two instruments. Dial at left shows time spent by containers in the oven—Instrument at right records baking temperatures from six different points in the oven.



◀ • Here is a view of one of the great baking ovens. Special instruments located at frequent intervals along the entire length of the ovens uniformly control, and record, the baking temperatures.

• Recordings of oven temperatures, time spent by containers in the oven, etc., during actual production, are checked against blue printed specifications in the laboratory. These charts become a permanent part of the vast library of data available at Wilson & Bennett.

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chona bark, glycerin, and nux vomica, all assumed a position of increasing importance to the national effort. Forehanded action by government and industry had laid in stratgetic stocks of opium and cinchona bark, thus assuring reserves sufficient to care for national requirements of narcotics and quinine, probably for about three years under careful distribution. A government stock pile of quicksilver was also created.

Price Ceilings

A few drugs and fine chemicals received the attention of the Office of Price Administration. The first order of OPA concerning prices was issued late in August when the first price ceiling affecting chemicals was established on formaldehyde. In the weeks following, ceilings were set on glycerin, castor oil, alcohol, natural methanol, acetic acid, acetone — to list most of them.

Prices on some other items were stabilized either by the voluntary action of manufacturers, or at the request of OPA—a request amounting to an order, from the standpoint of the manufacturers affected. Cadmimum metal and synthetic methanol are examples of such voluntary action.

The office of Production Management came into the picture when it applied to drugs and fine chemicals its system of priorities, allocation general limitation order, industry control, and the critical list of the Army and Navy Munitions Board.

After the Federal government's program of lend-lease was begun in March, government purchases, made in furtherance of that program, accounted for a substantial part of the rise in sales volume. Shortages were immediately felt in supplies remaining for home consumption but it must be said that little or no complaint was heard during the Summer and Fall months, and absolutely none when the Japanese attack on the Hawaiian Philippine Islands brought the United States war declarations against Japan, Germany and Italy.

Argols

One of the greatest dislocations to trade took place in products derived from argols and crude tartar in all forms. The German conquest of Europe ended exports of argols from Italy and France. It impaired the exports from Spain and North Africa and made the Argentine increasingly important as a source of supply.

The efforts of tartrate manufacturers to get argols was quite successful but only on the expense of constantly rising prices. Imports of argols in January - August, 1941, totaled 19,000,000 pounds, comparing with 17,000,000 pounds in the corresponding period of 1940. The higher costs were reflected in advancing prices on tartaric acid, cream of tartar, Rochelle salt, and Seidlitz mixture.

Quicksilver

The rise in quicksilver prices was sharp over the entire year and prices at the end of December were tops for the twelve months. The rise in quotations on mercurials naturally followed but it must be said that the advances were moderate and gives full evidence of the determination of the manufacturers not to permit values and their movements to get out of hand. Quicksilver production for January-August, 1941, totaled 28,000 flasks, according to the United States Bureau of Mines and compared with 21,000 flasks produced in the previous six month output. The total quicksilver produced set a new high record for at least the past sixty years. The need was great and the mounting consumption was stimulated vastly by the ship building program which increased sharply the need for mercury oxide paint for ship bottoms.

Quinine

When the United States went to war in the Far East, the wisdom of government and industry in creating strategic reserves of cinchona bark and quinine was apparent. At that time, it was estimated that the bark reserve provided at least 11,000,000 ounces of quinine in the bark. Creation of the stragetic reserve began in 1940.

According to the Department of Commerce data, total imports of cinchona bark, and derivatives of cinchona bark during the period between January, 1940, and August, 1941—the August data being the last available at this writing, were as follows:—Quinine sulphate, 7,141,704 ounces; all other quinine salts and cinchona bark derivatives, 2,212,427 ounces; cinchona bark, 8,952,414 pounds.

The price of quinine sulphate advanced but twice since the war began in September, 1939, the total rise between then and August, 1940, being 6c. per ounce. However, the net cost to the manufacturing and other consumers is actually 19½c. per ounce above the September, 1939, prices. Of the total rise of 19½c. per ounce, 13½c. of it has been caused by the rise in ocean freight rates, war risk insurance, marine insurance, and other costs stemming directly from the war.

In place of advancing the quinine quotations, the producers and first-hand sellers have had in force a surcharge added to the quinine price and invoiced to buyers as a separate item to show them just how much of the net price to buyers is due to the war. The surcharge at the beginning of 1941 was 7c. per ounce, and by the end of the year it had reached 13½c. per ounce. The actual price for quinine was unchanged throughout the year. The surcharge system started in September, 1939, and the first charge was 4c. per ounce.

Ethyl Alcohol

Plans to assure manufacturers sufficient supplies of ethyl alcohol in pure and denatured form were developed and it appeared certain that the plants of some of the large producers of whiskey and the like would eventually be used for alcohol production in the interest of industry and the prosecution of the war.

The ethyl alcohol market did business under higher taxes on tax-paid goods. By the close of the year the Federal excise tax had reached $7.60 per gallon and the rise in tax accounted for much of the higher prices paid for alcohol during the year. To be sure, some of the rise was attributable to the advancing cost of blackstrap molasses, which, by the close of the year, was fully 100 percent higher in price than at the beginning of the year.

Rearmament, defense activities, and, finally, provision for full-out, fighting war placed a heavy burden on the productive capacity of the nation. Statistical data on alcohol transactions are issued on a fiscal year basis, ending June 30 each year, by the Alcohol Tax Unit.

In the fiscal year ended June 30, 1941, the total production of ethyl alcohol was 298,845,415 gallons, comparing with 243,727,756 gallons in the previous fiscal year.

Production of completely denatured alcohol was 17,676,170 gallons, comparing with 15,352,033 gallons in the 1939-1940 fiscal year.

Production of specially denatured alcohol was 135,542,718 gallons for the 1940-1941 fiscal year, against 111,409,797 gallons in the 1939-1940 period.

Stocks at the end of June, 1941, were:—Ethyl alcohol, 10,393,252 gallons, being half the stock in June 30, 1940; completely denatured alcohol, 441,151 gallons, being 57,831 gallons less than the June 30, 1940 stock; and specially denatured lacohol, 653,416 gallons, a drop of 510,074 gallons from the June 30, 1940, figure.

Between July 1 and November 30, 1941, ethyl alcohol production totaled 177,010,345 gallons; completely denatured alcohol, 12,111,374 gallons; specially denatured alcohol, 70,252,810 gallons. The total alcohol produced in that period was about 10,000,000 gallons more than had been made in the corresponding period in 1940.

The use of methanol as an antifreeze for motor car protection was stopped by government fiat and the production of both natural and synthetic material was drained into industries directly concerned with the war and the maintenance of public health.

Opium

The opiate situation was well in hand throughout the entire year. Here, again, did the Federal government provide a strategic reserve which it held in bonded warehouse and apportioned to the manufacturers of codeine and morphine as their actual needs arose. At last reports, the Federal stock protected the ordinary needs of the nation for about three years. Now that the country is at war, this period of protection will probably have to be

"AN OLD HAND AT THE HELM"

The hand that created and developed "Dryalls" *remains* at the Helm. This is a reassuring fact to the Drier consumer. In these troublous times when practically all industries have to seek new products to replace the old, and substitutions of one sort or another are inescapable, the knowledge which comes from long experience in one's own line is a pre-requisite—*if the job is to be done adequately*.

Substantial improvements have been effected in many "Dryalls"—more are yet to come, for we are not set up to "rest on our oars," and hence must progress. It is in your interest to examine "Dryalls."

DRIERNOTES No. 5

All "Dryall" Driers are essentially *drying* in character—a point of extra importance in certain Formulations. Their Acid Value is carefully controlled in relation to the intended application—eliminating risk of increasing the acidity of a Vehicle in which minimum Acid Value is desirable. They are free from objectionable odor—a distinct advantage in many Interior Finishes. They are closely akin to Oleoresinous Vehicles in fundamental composition—hence introduce no *foreign non-drying* matter into your Vehicles.

STRAIGHT SOLIDS

Mn #88—8.8%
Pb 42%
Pb Special 35%
Pb Special 30%
Co #85
Zn 9.5%
Zn 12%
Zn 16%

STRAIGHT LIQUIDS

Mn 4%
Pb 24%
Pb 16%
Co 4%
Ca 5%
Zn #7-D—7% Zn

COMBINATION SOLIDS

Mn-Pb #510—
5% Mn 10% Pb
Mn-Pb #3618—
3.6% Mn 18% Pb
Mn-Pb Special #315—
3% Mn 15% Pb
Mn-Pb #2520—
2.5% Mn 20% Pb
Mn-Pb #2222—
2.2% Mn 22% Pb
Mn-Pb Special #120—
1% Mn 20% Pb
Mn-Pb #130—
1% Mn 30% Pb
Co-Mn #44—
4% Co 4% Mn
Co-Mn-Pb #3120—
3% Co 1% Mn 20% Pb
Co-Pb #222—
2.2% Co 22% Pb
"DeCastroil" A-15—
"DeCastroil" C-1—
"DeCastroil" C-2—
Special for dehydrated castor vehicles.

COMBINATION LIQUIDS

Mn-Pb #210—
2% Mn 10% Pb
Mn-Pb #1515—
1.5% Mn 15% Pb
Mn-Pb #1512—
1.5% Mn 12 Pb
Mn-Pb-Co #1210—
1.2% Mn 10% Pb
.1% Co
Co-Pb #1515-C—
1.5% Co 15% Pb

"DRYALL" Chemical Driers—Logical Choice for Coatings made to DRY

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35th and SMALLMAN STREETS PITTSBURGH, PA.

revised since consumption of codeine and morphine will rise as army and navy casualty lists are created.

Department of Commerce import data provides a grand total importation of 329,296 pounds of opium between January, 1940 and August, 1941. The 1941 total was 199,862 pounds. Opium prices advanced once in 1941. Those of codeine and morphine remained unchanged.

Products from Japan

Three important drug products, agar, camphor, and menthol, come mainly from Japan and shipments from that country were made steadily until August, early in which month trade with Japan was bruskly ended by presidential order. Therefore, the major price activity in the enumerated materials came between August and December. Naturally, it was activity in but one direction—upward and by the close of the year stocks that were in the hands of regular importers were almost exhausted and prices were practically nominal.

Fortunately, there is a domestic production of synthetic camphor and menthol. The former is made from domestic turpentine and hence supplies of raw material are assured. Synthetic menthol, however, is made from Java citronella oil and once the United States went to war with Japan, exports of Java citronella were at least imperiled.

In all probability, it may be actually impossible to get boats through from Java until such time as the United Nations get command of the air and oceans in the Far East. There remains Ceylon citronella oil but that source is in little better position than Java.

As to agar, the future is dark. Japan is the sole source for commercial quantities. In an emergency, some production on the Pacific coast may be undertaken but Japan is bringing the war close to the Pacific coast states and operations of craft in the areas where agar may be collected is uncertain.

Caffeine

Crisis in the matter of supplies generally prevailed almost throughout the year. The normal source for raw material used in manufacturing caffeine passed with the German conquest of Holland. Domestic makers turned increasingly to tea waste but its transport from the Far East was hindered, first, by the crisis in shipping, and, second, by the Japanese-United States war. Theobromine in all forms passed out of the picture.

Bromides

The call for bromides out-rode the output of bromides, notwithstanding which the producers did a good job in keeping users reasonably well supplied and at prices totally without change on the part of the largest producers.

Minor alkaloids worked into woefully short supply by the close of the year and prices were generally sharply higher by the close of the year. More important, the formerly leading suppliers were, in December, unable to offer anything at all and such deliveries as were possible came from two large companies who undertook domestic production of extremely scarce articles. Normally, Europe supplies the minor alkaloids. The domestic production shows a fairly high cost and the total output needs substantial increase.

Vitamin Bearing Oils

Vitamin bearing oils had their own particular crisis. War reduced imports of codliver oil until only Iceland, Newfoundland, and Canada remained as sources of supply. Considering the situation generally, the fact that prices advanced but $15 during the year was more than a tribute to the sound merchandizing policy and program of the leading suppliers. When trade with Japan stopped in August, 1941, not only did her fairly substantial exports of codliver oil stop but also did her exports of frozen fish livers. There promptly followed a crisis in the supply of both halibut and tuna liver oils offered normally from the Pacific Coast. Prices advanced in leaps and bounds and, eventually, sellers of those materials refused to name open market quotations; they treated each transaction individually as it arose. Fishing operations in California waters came to an end, the result of numerous causes in which the Japanese situation was but one.

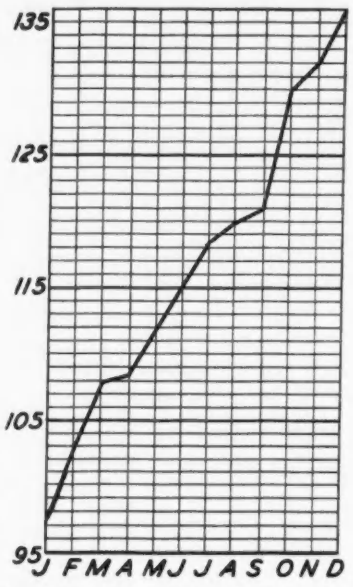
Against this crisis in natural vitamin bearing materials was the almost sensational expansion in the production of synthetic vitamins without which the vitamin requirements of the nation could not have been provided. Demand throughout the year was so great that most of the time the makers of synthetic vitamins were far behind in deliveries.

Botanical Drugs, Spices, and Gums

The story of botanical drugs in the year of 1941 is largely one of inability to buy replacements in normal primary markets, steadily dwindling spot stocks of most imported items, attempts at domestic cultivation of a small number of important materials, and, finally, of prices pointed almost entirely in one direction—upward.

Botanical Drugs, Spices, and Gums Price Trend Over 1941

(Based on monthly averages for 40 typical materials)



100.0=Dec. 30, 1940-Dec. 29, 1941=137.3

A broad background is needed properly to view the 1941 market. It will be recalled that World War No. 2 began September 1, 1939. September was moderately early in the season when domestic botanical drugs are collected but, so far as foreign grown drugs were concerned, it was not too late to permit dealers materially to increase their foreign purchases with a view to increasing greatly their warehouse reserves.

The war also came at a time when it cut athwart sea lanes used to transport European botanical drugs to this market. In the first instance, the outbreak of war involved Germany against Britain and France. That brought a blockade of the Adriatic Sea and virtually closed the outlet through which European botanicals might have been shipped out of Hungary, Czechoslovakia, and Yugoslavia —the heart of the European collection districts.

Nevertheless, the New York botanical drug dealers fell to with determination and bought heavily abroad, taking long chances as regards getting goods for which they practically paid cash for at the time of purchase.

These goods were shipped out of Europe at every possible point and on every possible occasion. The total value of botanical drugs, herbs, roots, leaves, and the like, in 1939 was $32,231,464. Despite every possible effort being made to get every pound of foreign merchandise possible in 1940, the total value of imports in that year was down to $15,031,303. These figures compare with imports in the first half

OVER TREACHEROUS OCEANS

fresh supplies of Shellac and Natural Resins are moving to United States markets for use in the manufacture of PROTECTIVE COATINGS for DEFENSE and ESSENTIAL CIVILIAN requirements, as well as other necessary products. While interruption of shipments and losses may be expected, we will make every effort to assure a continuance of supplies under the difficulties of the present and future.

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Bone Black *Drop Black*
Ivory Black *Carbon Blacks*
Oxides, all shades
Genuine Van Dyke Brown
Genuine Sap Brown Crystals
Cadmium Yellows
Cadmium Reds
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of 1941, imports whose total value was but $5,995,121.

Central European Products

Successful attempts to raise spot reserves stocks as high as possible in 1940 came almost to an end when Italy became allied with Germany on June 11, 1940. That act ended all chance of getting direct shipment of Central European botanicals to this country. It had been already difficult since Germany had, by the end of 1940, taken military possession of practically every country producing, selling, shipping, or in any way factoring in the production and distribution of botanical drugs.

Such was the broad and general, if rather sketchy, background against which 1941 was born. In January, the United States had already taken, unofficially but none the less definitely, its stand in support of democracies fighting Germany and Italy. By March, the Congress adopted the policy of lend-lease, cementing the relation of the United States to the fight against Hitler-Mussolini. In June, Germany began undeclared war on the Soviet Union and lend-lease was extended to the Russians; the Chinese already had it.

The ultimate showdown came at dawn, December 7, 1941, when Japanese bombers blasted the army and naval bases the island of Oahu, Hawaiian Islands, Hickham field being to army center and Pearl Harbor naval base.

Congress declared war on Japan the next day, and, four days later, following declarations of war on the United States by Germany and Italy, the Congress declared war on the countries of Hitler and Mussolini and this country was in the World War No. 2 up to its neck and for the duration necessary to achieve victory.

The year of 1941 was one in which the ultimate path of the United States was clear enough to all, save those who did not want to see. It was almost as clear in January as it was in December. International events on every hand were drawing this country toward the whirlpool. If civilization as we knew it were to survive, then the United States would have to go to fighting war, however much its people hated it. Self-preservation alone dictated the course. Once Japan bombed Pearl Harbor, division of opinion ended and a new slogan, "Remember Pearl Harbor," was added to those former rallying calls, "Remember the Alamo," and "Remember the Maine."

Early in 1941, certain European ports remained open to American and other shipping notwithstanding that the President, following passage of the neutrality act, named belligerent zones and barred them to United States shipping. These ports were in Portugal and Spain and through them, for a time European crude drugs continued to be shipped to this country.

But such movements dwindled steadily, especially after Germany conquored Greece and Greek ships no longer plied the Mediterranean routes to Spanish and Portuguese ports. By the end of the year, all connections with Spain ended when Spanish ships were withdrawn from service, and the movements from Portuguese ports became negligible to nil.

Also, during a considerable part of 1941, shipments of some botanicals were made from North African ports. In some instances, these goods came direct. In others, they were carried to islands in the Atlantic Ocean where they were transshipped to this country. Again, Near East merchandise also found its way to this country via the Red Sea, such movement receiving a stimulus when the President removed that body from waters barred to United States ships. Finally, for the greater part of the year, trade routes to the Far East were open. Until August, 1941, even Japan could ship here but in the first week of that month, the President issued orders that ended all commercial relations between Japan and the United States.

Far Eastern Supplies

Drying up of practically all save Far Eastern sources of supply turned the New York botanical dealers to a search for new sources of supply. The search centered on Far Eastern countries still available to United States commerce, and to South American countries whose possibilities were realized to some extent, but far from fully. From India was obtained goods badly needed in this country—belladonna, licorice, and valerian, for example. From the Argentine came others, noteably stramonium and chamomile. It is impossible fully to list all the materials which awarded the efforts of the importers. The fact was the importers were disinclined to make known just what they were getting and from where. That they did succeed in getting goods that formerly came exclusively from Central Europe was admitted but except for the comparatively few materials available in South American countries, it is safe to say that the total result of their efforts provided but a partial supply of needed goods. However, every pound was welcome and of great benefit to manufacturing consumers.

In broad and somewhat general terms, new sources of supply were developed in Algeria, Argentina, Brazil, Chile, Cyprus, Greece, India, Mexico, Persia, and Spain.

The value of all imports of drugs, herbs, leaves, roots, etc., as reported by the Department of Commerce for the January-September, 1941, placed was $9,319,022. This compares with $11,117,435, the value of imports in the corresponding period in 1940, as well as with the 1940 total import value of $15,031,303.

Domestic Cultivation

Domestic cultivation projects naturally sprang up as the national need pressed. Cultivation of belladonna, dill, stramonium, henbane, santonica, and collection of such things as native growing juniper berries, hawthorn berries, moss, red clover, angelica, calamus—to name a few—was begun, oftentimes under financing and raw materials supplied by the botanical drug dealers. The results of home efforts were not superior, nor were they more than moderately helpful. But here, again, anything was better than nothing and every pound of merchandise produced was eagerly stored against future needs. All was grist to the mill of domestic consuming needs.

The efforts at domestic cultivation were made in California, the North Pacific Coast States, the New England States, Michigan, Maryland, and New York—to mention a few that come to mind readily. So long as there is war and high prices, these domestic cultivation projects are likely to be profitable to the farmers and to serve the nation well. Once normal European sources are open to trade at the close of the war, it is doubtful that the projects can be maintained here unless a paternal tariff protection be draped over the infant industry by the Federal government.

In writing of the botanical year, the mind centers naturally on imported goods since it is they which have been affected enormously by the war. But domestic botanical drugs play a very large part in the botanical drug economy of the nation and domestic items have not escaped war influences.

Once the United States began seriously to prepare for what at first was called national defense, industrial project sprang like mushrooms over the land. Domestic botanical drugs are collected mainly in the Southern Mountain States, and in States adjacent there to. Defense projects of all sorts were eventually located in areas close by the domestic collection centers and once really underway, the effect was quickly felt by those seeking to increase collection of domestic drugs generally and, especially, of those known to grow here but formerly not gathered because they could be bought cheaper in Europe and other primary markets.

Defense demanded labor in vast quantities. Demand for labor meant high wages for every worker obtainable. And once the demand came, it hit the domestic collection areas sharply. Father and son alike laid aside the hoe, the knife and the pick and hied to where industrial plants were building and army forts were being established, following the adoption of conscription.

Collection areas were almost denuded of workers and despite the higher prices botanical dealers and collectors offered to encourage activity on the part of gatherers, the results were far from satisfactory. Quantities gathered were less and they were obtained at

much higher cost to the firsthand collectors. Young men were sucked into the growing army and those who were not went to work for day wages in company with the elder folk. Those remaining in the collection areas were totally unable to produce stocks of normal size.

To protect stocks of botanical drugs generally in the country, the Federal government instituted control over all export business. At first, a few botanicals were controlled specifically but eventually it became necessary to put special license requirements into operation save that in most instances export under general license was permitted to Great Britain, Canada, Iceland, Greenland, and, usually, to the British Commonwealth of Nations.

Essential Oils and Aromatic Chemicals

Of all the influences that ran over, under, around and through the market for essential oils and aromatic chemicals, war had by far the greatest effect throughout 1941.

War continued to keep European sources of supply effectively fenced off. To be sure, some lots of oils did reach here but they were usually a mere trickle compared with the normal arrivals and reached here by devious and indirect routes.

War reduced shipping of Far Eastern oils and throughout the year was one of dwindling supply.

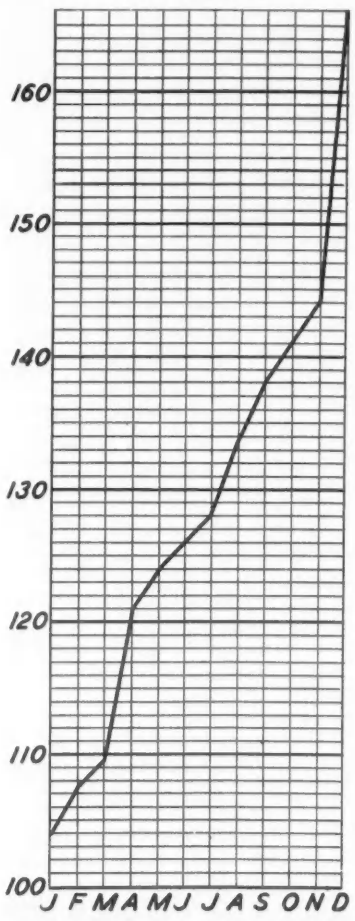
War turned thoughts of dealers and consumers to South America as a possible future source of production and supply but even where climatic conditions favored production, conditions showed clearly that it takes time to create a new industry and time is just what these have least of.

War brought the spot shortage of natural products and war turned local dealers activities in the direction of producing in major quantities substitutes for natural products either entirely unobtainable or available only in very small quantities at exceptionally high prices.

Finally, war came to the United States on December 7 when, after bombing Hawaii and the Philippine Islands, Japan declared war on this country and the United States replied in kind on December 8. Four days later, Italy, followed by Germany, declared war on the United States and the Congress hurled a declaration within a few hours. The world-wide aspect of this war emerged with a suddenness that the Nation took in its stride.

Essential Oils and Aromatic Chemicals Price Trend Over 1941

(Based on monthly averages for 20 typical materials)



100.0=Dec. 30, 1940-Dec. 29, 1941=172.7

Two full years of war had provided the cushion that softened what otherwise would have been a severe shock to the market. Actual shortage of supplies was already a fact when this country became actively belligerent against Japan, Italy and Germany. The shortages had mounted especially during 1941 and stocks at the beginning of that year had been shorn already by a year and a quarter of conflict between the British et al and Germany et al.

Transportation, ocean freight, and insurance rates rarely moved in favor of the importer. The trend was definitely upward and directly after the crisis raised by Japan, Italy, and Germany early in December, not only were all trans-oceanic higher but war-risk rates covering freight moved coast-wise were advanced.

Another very annoying business factor, and it afflicted trade throughout the year, were the terms of payment set up by foreign shippers. Banking arrangements usually effective in providing equitable protection for buyer and seller alike gave way and it was not at all unusual for foreign sellers to insist on payment for merchandise before the goods were put aboard the ship. That meant that the importer sent his money abroad before the goods even started and, consequently, he bore all the risk. If the goods never arrived, it was just too bad; but the shipper had his money.

Another annoyance to trade was the fairly common arrival of merchandise before the arrivals of documents. More than fairly often, the owner of goods received no notice of the arrival and the goods went to general order—another expense factor to be added to the already high cost of doing business in war time.

Far Eastern Oils

Although the essential oil market had become hardy and immune to shock by the two years of war that preceded the Japanese treachery, the effect on values was almost explosive in the case of Far Eastern oils. All were in the smallest kind of spot supply. All were high in price. All were virtually nominal. But when the United States went to war, the eruption of values was prompt and explosive.

Dealers fortunate enough still to have even token stocks promptly withdrew from the market and it became virtually impossible to get an even nominal quotation. Some other oils were affected but to a lesser and hardly important degree. So far as

In Far Eastern oils it became increasingly clear that until the United States and British navies and air arms can definitely get control of Far East-

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Calcium Magnesium Salt Inosithexaphosphate
Calcium d-Saccharate
Cellobiose
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Choline Chloride
Cyanoacetamide
Cysteine Hydrochloride
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Hydrazine Hydrate
Inositol
Lysine Dihydrochloride
Maltose
Mannitol
Melibiose
Methyl Iodide
Mucic Acid
Naphthoresorcinol
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NICOTINIC ACID DIETHYLAMIDE
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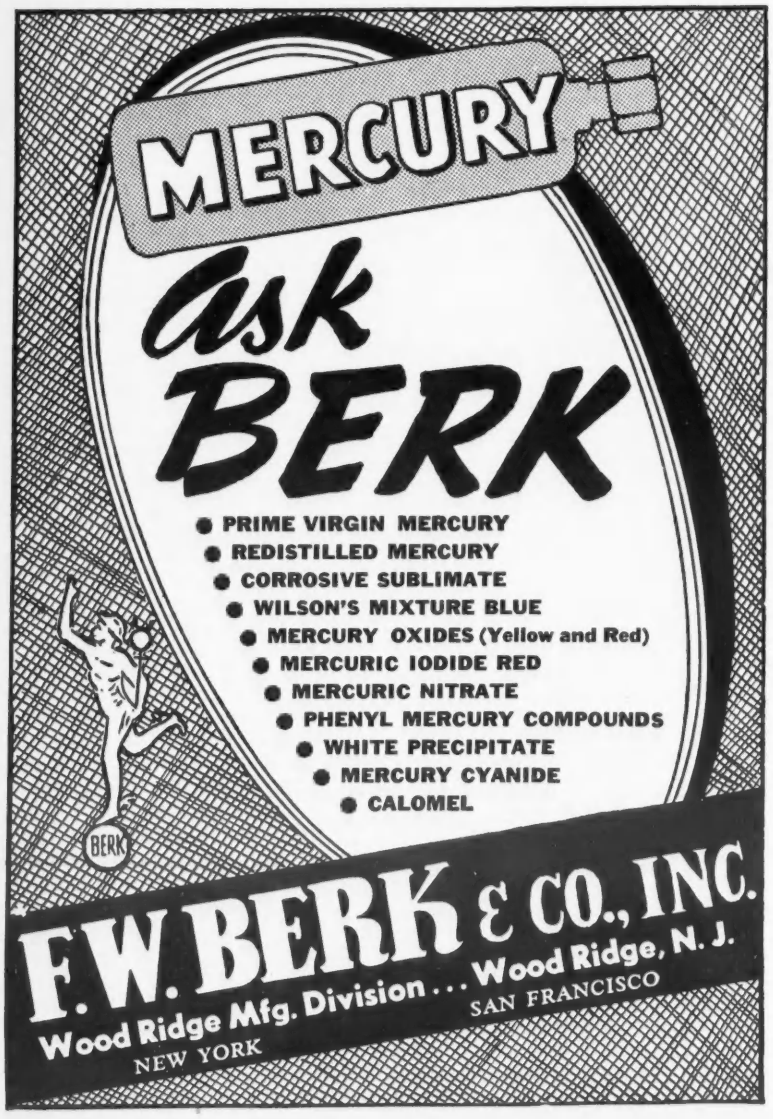


ern waters, transport of oils will be virtually impossible. And, after all, such oils can be rated luxuries and, hence cargo space is far more likely to be devoted to Far Eastern goods needed directly for prosecution of the war.

Far Eastern oils, the prices for which had advanced during the year and, following the start of war with Japan, became practically nominal, were anise, cananga, cassia, Ceylon and Java citronella, eucalyptus, lemongrass and vetiver. Most dealers were unable to offer any spot material and those with supplies exercised extreme reserve in accepting business from other than their regular customers. It seemed not unlikely, at the year-end, that most of them would become unobtainable.

European Oils

Once Germany over-ran the European continent, replacement of European essential oils became almost impossible. Early in the year there was still some contact, use being made of export through Spanish and Portuguese ports. But as the year passed, the contacts became irregular, strained, and in some instances stopped entirely.

Toward midyear, the situation of manufacturing perfumers became almost desperate. The essential oil importers and dealers, acting through their association, prevailed on the Department of State to press negotiations with the British Government for issuance of a navicert under which needed goods might be brought through the blockade to this country.

Not until October was anything like success achieved. In that month, arrangements were concluded under which British navicerts were issued to cover imports of 50,000 kilos of geranium oil, 50 kilos of lavender and lavindin; 1,000 kilos of neroil, and 25,000 kilos of ylang ylang. The goods originated in France or French North Africa, and Madagascar and probably were to reach this country via the French island of Martinique.

Two years of war had forced European oils to run practically the full gamut of price advances. The fact is that except for some oils originating in Spain, stocks of other European oils were so low that quotations had ceased to mean much of anything.

The following is fairly illustrative of the price trend on some of the more important materials:

	Per pound— Jan.	April.	July.	Oct.	Dec.
Almond, sweet	$0.70	$1.70	$1.70	$1.80	$2.35
Caraway	6.00	9.50	9.50	12.00	15.00
Lavender, flower	5.00	7.25	8.25	10.00	11.25
spike	1.35	2.45	2.45	2.60	2.75
Rose	5.50	16.75	16.75	28.00	30.00
Rosemary	.63	.85	.83	.85	1.80

Citrous Oils

The story of bergamot, lemon, lime and orange is mainly the story of the success of the domestic producers in supplying lemon and orange at remarkably stable prices, of the total disappearance of Italian bergamot, lemon and orange from the local market, of the appearance on this market of orange oil from Argentina and Brazil, of lemon oil coming from Uruguay, and the almost total extinction of West India lime oil offerings and the strain placed on Mexico for supplies not too plentiful.

But mainly it is a story of the domestic lemon and orange oil makers. Domestic needs of lemon were filled almost solely from California production until some oil from Uruguay appeared late in the year. The price was held at $3.25 per pound for California oil throughout the year. California expressed orange oil advanced from $2 in January to $3 in April, then holding steady. Distilled oil rose from 90c. in January to $1.70, reached late in December. When Brazilian and Argentina oils came on the market, they sold steadily at $3 for the former and $2.85 for the latter.

Domestic Oils

Within this group may be included not only leading oil distilled here from native raw materials, but also oils made here from imported raw materials.

Of the purely native oils, peppermint was by far the outstanding item—and peppermint emerged from a some what drab background only after imports of menthol from Japan and China stopped and the middle-western farmers recalled the $28 per pound peppermint oil market of 1925—when the Japanese earthquake stopped menthol exports and caused domestic peppermint oil to be diverted to menthol manufacture.

Of the oils made here from foreign raw materials may be cited clove, ginger and nutmeg. All of these gathered strength as the war raised raw material prices and made transport uncertain and costly.

Fertilizer Materials

A gigantic agricultural program, planned under the supervision of the Department of Agriculture, got underway in 1941, with peak production of virtually all farm products as the goal. As the fortunes of the fertilizer industry reflect those of the American farmer, 1941 witnessed one of the broadest demands for fertilizer materials that the industry ever has experienced.

In comparison with other industries, the fertilizer trade suffered only slightly by governmental regulations. In mid-year several of the larger nitrogen manufacturers filed consent decrees and paid fines in termination of charges of conspiring to restrain the production and sale of fertilizers in the United States. On the whole, however, most of the products escaped priorities, allocations and price ceilings, despite the fact that many fertilizer raw materials also are important materials in the manufacture of munitions of war.

Nitrogen

Nitrogen, one of the primary plant-food elements, is the basis of practically all modern explosives. Phosphorus, the second plantfood element, is an active ingredient in incendiary bombs and tracer bullets. Potash is essential in the manufacture of optical glass and gas masks. Compounds of the above three are used in the production of literally hundreds of defense materials. Sulphuric acid, necessary for the production of superphosphate, also is essential in the making of trinitrotoluene and smokeless powder.

The nitrogen supply situation was fairly promising during the major part of 1941. The United States did not declare war until late in the year and therefore the government's need for nitrogen for munitions did not reach proportions sufficient to bring strong pressure on the fertilizer industry. Early in the year, the trade expressed confidence it had the capacity to produce all the nitrogen needed for defense and also satisfy the needs of agriculture.

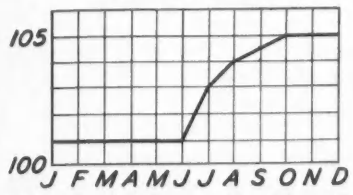
Nitrate of Soda

Possibly the biggest headache to the fertilizer industry in 1941 was the transportation problem. This was especially true in the bringing of nitrate of soda to the United States from Chile. The Maritime Commission joined the industry in attempts to work out equitable solutions but the lack of bottoms hampered shipments to an extent that final figures for the year probably will show imports of this product lower than 1940.

Meanwhile, demand for Chilean nitrate jumped greatly and the inability of suppliers to increase imports enough to meet this demand created a strain on supplies in the United States. Many regular users of nitrate began looking for substitute materials and these, in turn, also felt the pressure of greater demand. On

Fertilizer Materials Price Trend Over 1941

(Based on monthly averages for 4 basic materials)



100.0=Dec. 30, 1940-Dec. 29, 1941=104.9

January 13 the United States contracted with Chile to buy 30,000 short tons of nitrate to be used as a reserve supply in this country.

Tightness in the market for domestic nitrate of soda also was witnessed throughout the year. Contract customers were luckily able to obtain adequate amounts but there were few spot offerings. The scarcity of the imported product was partly responsible for a Summer rise in prices on the bulk and bagged material. Domestic in bulk was unchanged throughout the year, but the increased cost of burlap bags forced an advance of nitrate packed in those packings. The demand for nitrogen solution was well maintained throughout the year, with the market very tight.

Sulphate of Ammonia

Sulphate of ammonia suppliers started the fiscal year by advancing prices but the Office of Price Administration prevented another boost in July by requesting that quotations remain unchanged for the new fertilizer year. Similar to nitrate of soda, demand for sulphate was far ahead of previous years and early in the Spring many of the smaller producers had contracted for their entire output. The export call also was heavy but actual shipments were much lower than in 1940 due to the difficulty in securing export licenses. A strain on sulphate supplies was the demand for this ingredient to be used as replacement for nitrate of soda.

Urea

One occurrence during the year which came as a surprise to the trade was a reduction on June 15 of prices on fertilizer urea. No explanation for the lower price was advanced but it was a welcome sign to consumers who were undergoing a period of advancing costs. The high cost of anhydrous ammonia and its diversion to the 'war' industries naturally brought about a contraction in its consumption by the fertilizer trade in 1941.

Cyanamid and ammonia phosphate were in heavy call during the year but offerings were narrow and in most cases producers were not quoting freely. Little manganese sulphate was available to meet demand. No imports of calcium nitrate were reported and shipments of castor pomace to the United States were negligible. Domestic pomace movement expanded, with supplies fairly adequate to absorb an increased demand occasioned by the lack of imported material.

Animal Products

The higher prices being paid for hogs and other livestock last year brought a tremendous boost in the demand for animal products used for feed material. Tankage, bone material, dried blood, nitrogenous material and fish scrap all moved in larger volume. Imports of these products were larger, except for nitrogenous and fish scrap. No Japenese scrap was shipped to the United States during the better part of 1941. Other reason for the increased demand for animal stuff was that many consumers who ordinarily had obtained their plantfood elements from chemicals were turning to organics for substitute use.
ganics for substitute use. Most mixers and consumers found prices on animal products too high for use in fertilizers, however, and turned to cheaper materials, such as cottonseed meal, cottonseed hull ash, peanut meal and castor pomace.

Potash Salts

Unlike World War I the United States no longer was dependent on Europe for its total supply of potash salts and in 1941 domestic production had been stepped up to a point where there was sufficient high-grade muriate of potash to supply the American market both for chemicals and fertilizers, with any deficiency being satisfied by adequate supplies of run-of-mine grades. There was pressure on potash supplies late in the year, but this was due to the curtailment of production at the plant of one of the producers by a fifteen-week labor shut-down. Potash salts exports were controlled by a January 10 order placing them on the general licensing list.

Superphosphate

There was ample phosphate rock in 1941 but a superphosphate shortage was witnessed just the same. The problem can be traced to a bottle neck in transportation facilities for coast-wise shipments of rock and sulphur. The superphosphate market also was adversely affected by the dislocation of sulphuric acid because of the expanding explosives program. Also, many producers were finding it more profitable to dispose of their acid outright than to acidulate rock.

Sulphur

Of the entire trade, the sulphur situation was of least concern during the year. On January 1 prominent producers pledged they would protect consumers against price increase during the year. Later, the delivered cost to consumers was higher due to an increase in freight rates, but the f.o.b. quotations remained unchanged throughout the year. No fear of a possible sulphur shortage was seen, above-ground reserves being ample to meet any expansion in demand. Again, however, there was a transportation problem.

Petroleum Products

The petroleum industry last year enjoyed the greatest volume of business in history, despite the diminution of exports caused by the war. Output of crude petroleum and production of industrial products were at peak levels to meet the large expansion in consumption. The greatest problem faced by the industry was one of transportation.

Because of the transfer of the equivalent of eighty tankers of 10,000 gross tons each to the British, a shortage of oil products was threatened in the summer of 1941. However, by using other forms of transportation to the fullest and also by operating the remaining tanker fleet at the highest possible rate, the threatened shortage did not develop. The subsequent return of these tankers, the completion of others, and the construction of three pipelines gave assurances that the transportation problem was being met.

Crude Oil

Official estimates indicate that the production of crude oil in the United States last year rose to more than 1,400,000,000 barrels from 1,353,214,000 in 1940. Domestic consumption of petroleum and its products rose nearly 12 percent to an estimated 1,478,697,000 barrels, but exports dropped to 105,909,000, to make total demand 1,584,606,000 barrels. At year-end, stocks of crude oil were 259,219,000 barrels, against 275,985,000 a year earlier.

Faced by record demand for its products, and urged by the government to expand its energies to increase production, the petroleum industry in 1941 made determined but futile efforts to increase prices on crude oil enough to make such expansion pay. On March 29 prices were raised on crude from fields in Texas and New Mexico. This ad-

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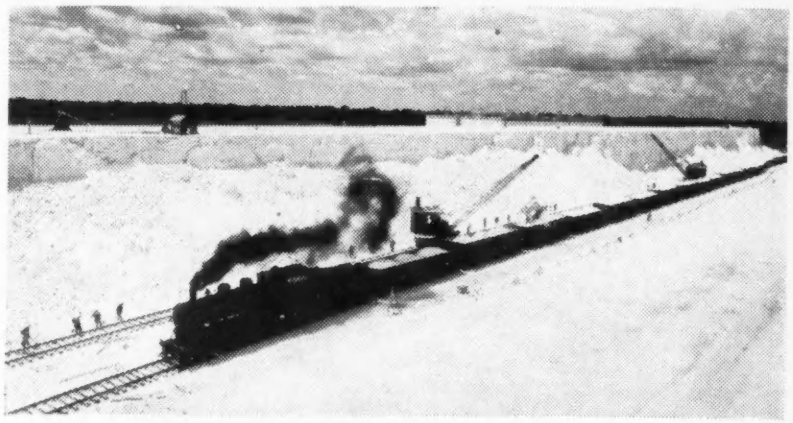

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vance rapidly spread to practically every other field in the country, except California, where adjustments already had been made. Late in May and again early in June, prices were raised. Late in June prices on Pennsylvania crude oil were boosted, bringing them to the peak of 1940 prices, which was a ten-year high.

In July the Office of Price Administration acted to prevent price advances, and this was the start of six months of agitation for permission to advance prices sufficiently to allow for the expansion asked by the government. As early as July 15 one of the largest buyers in the Midcontinent oil fields asked that a price rise be allowed, but Price Administrator Leon Henderson requested that advances be held in abeyance until a government survey was completed. Over protests of Pennsylvania crude buyers and producers, the OPA pegged prices at levels of August 18.

In October, Price Administrator Henderson again refused to allow an advance in the Midcontinent despite pleas by producers that the declining rate of discovery could only be reversed by an advance. In early November an advance in North Texas crude prices immediately was protested by the OPA and a withdrawal of the intended increase was obtained. In December, however, the OPA stated that it would allow "reasonable and justified price increases."

Solvents and Diluents

Refiners in 1941 hiked output of various types of petroleum solvents and diluents, but the increase failed to offset the greatly enlarged demand. The growing scarcity in the available supply of naphtha, mineral spirits, solvents and other finished light products was becoming more and more pronounced as the year advanced. The usual problem, lack of adequate transportation materials, also plagued the trade.

There was a fairly good supply of petroleum derivatives used in the paint industry, with the exception of lacquer diluents, which were scarce. There also was a shortage of high-solvency aromatic naphthas due to the unusual demand as a result of the shortage of toluol, which was needed for defense purposes. As early as January 10, for example, there was no grade No. 4 aromatic naphtha available. The cut in the production of rubber tires did not ease the situation in regard to rubber solvent as this derivative was greatly in demand for defense work. The paint manufacturers throughout the year bid for large quantities of mineral spirits and v.m.& p. naphtha.

Liquefied Gases

Sales of liquefied petroleum gases were about 25 percent greater than in 1940, when the industry made the greatest strides in expanding its markets than in any year since 1934. Increased industrial activities, resulting from generally better business conditions and the national defense program were factors in the expansion of sales of these gases.

A firm demand existed for lighter fractions during the year, and manufacturers no longer viewed them as by-products, but operated their plants to recover higher yields. Throughout 1941 supplies of butane and propane were low and consumers were bidding anxiously, but were generally not able to acquire their entire needs. Demand for industrial and laboratory grades of all other lighter fractions also was higher last year.

Paraffin Wax

Weakness was reported in the market for crude scale paraffin wax as the trade started 1941. Indications that the government was going to come into the market for large quanties, however, soon prompted a buying splurge that caused heavy inroads in supplies. As a result, many prospective buyers were unable to obtain their normal needs. Producers strove to expand facilities for larger output, but the heavy demand throughout the year resulted in severe tightness of supply.

At midyear the shortage of crude paraffin was so acute that government attempts to buy a large quantity to ship to the British Navy were fruitless, only a fraction of the amount needed having been obtained. In an effort to halt runaway prices the OPA in late Summer conferred with producers in Washington on a possible price ceiling. The prices were ceiled on November 26, but this had little effect on the market, as only a small amount of crude wax was being offered at any price.

White Oils and Petrolatums

The demand for white mineral oils and petrolatums in 1941 was considerably higher than in the previous year. There was little pressure against supplies throughout the year as sellers closely supervised their stocks and successfully prevented scarcity. Early fears that production would be hampered by the inability to obtain crude oil due to the needs of the defense program proved groundless. The reason for this was that the amount of crude oil used in the manufacture of white oils and petrolatums is so small, and also that the cuts of oil used in their manufacture are so different from those necessary for defense purposes.

Petrolatums started the year in strong position and were placed on the export control list in April. Fractional price advances were recorded several times throughout the year. White mineral oils showed early weakness and prices were reduced in March. By the end of the first quarter of the year, however, the market had firmed considerably, buoyed for the most part by a greatly expanded export demand. Because of the export demand, tightness developed in the market and on August 29 export control licensing was ordered.

Lubricating Oils

One of the outstanding developments in petroleum products during 1941 was a continual rise in the domestic demand for lubricating oils. The increased momentum in demand was attributed to the growth of the defense program, and was the chief factor in the lift of refinery prices and the abortive effort to raise Pennsylvania crude markets.

Consumption of all grades of lubricating oils last year is estimated at about 31,220,000 barrels, an increase of about 27 percent over the 24,660,000 barrels consumed in 1940. Also, where most industrial petroleum products showed a drop in exports during 1941, exports of lubricating oils are estimated to have risen about 1,400,000 barrels to 10,495,000 barrels. Stocks declined about 1,000,000 barrels during the year.

Gasoline

One of the problems faced by the petroleum industry last year was an official request that the production of aviation gasoline be trebled. The domestic demand for this important war product showed the largest gain in the trade and refiners were pressed to meet the situation. Refining capacity was increased to an extent that 1941 production is estimated at 18,650,000 barrels, compared with 14,000,000 in 1940. The domestic demand amounted to about 13,500,000 barrels, compared with 6,570,000 in 1940, while exports were 4,800,000 compared with 4,700,000.

The government's program to treble the aviation gas output was given a tremendous boost in December when five oil companies owning patents on the processes of manufacturing this fuel agreed to reduce their royalties by 50 percent, thus enabling a greater number of refiners to participate in its production. By the terms of the agreement, royalties were cut from 42 to 21 cents per barrel, the rate to be effective until July 1, 1943, at which time royalty prices will be lowered further to 15 cents per barrel.

The demand for ordinary gasoline from the United States oil industry last year amounted to an estimated 701,363,000 barrels, about 10 percent higher than the 603,260,000 barrels in 1940. In both 1941 and 1940 exports were small and last year they dropped to an estimated 20,000,000 barrels, against 20,407,000 in the previous year. At the end of the year motor fuel stocks were estimated at 88,000,000 barrels, including 6,660,000 of aviation gasoline, compared with 84,400,000 a year earlier, when aviation gasoline stocks amounted to 6,350,000 barrels. These figures do not include stocks held by the government.

Kerosene

Of all the industrial petroleum products kerosene probably is the only one for which there was less demand in 1941 than in the previous year. Total domestic and export demand in 1940 was 72,150,000 barrels, while the domestic and export demand for last year is estimated at 71,400,000 barrels. The high domestic demand made up for further decreases in exports last year.

Oils, Fats, and Waxes

The year 1941 was featured in the market for vegetable, animal and fish oils, fats, and greases by a rising price trend which became especially pronounced during the second and third quarters of the period when a shortage of suppies of imported vegetable oils and prospects of increasing stringency as a result of the war in Europe were reflected in an active demand for oils and fats of all descriptions to meet the requirements of a steadily expanding consumption in many branches of American industry.

Early in January the REPORTER'S index number stood at 100.4. It had risen to 175.2 on October 13 when a reactionary tendency developed owing to a falling off in demand at the high prices then prevailing, and indications that the government was preparing to check undue speculative operations in cottonseed oil, lard, and soybean futures as well as in various other fats and oils through ceiling prices and other regulations.

The commencement of hostilities between the United States and Japan was followed by renewed urgent buying which lifted the index number to 176.2. On December 12 the government announced ceiling prices effective on that date and applying to all oils and fats except processed or finished fats and oils products, such as shortening and salad oils. The order forbid transactions at prices above those prevailing November 26, and while it was intimated that the schedule was temporary, issuance of the order brought business in many products in the local market practically to a halt as prices existing on December 12, when the order was issued, were in many cases considerably higher than those ruling on November 26. Trading in refined cottonseed oil futures on the New York Produce Exchange was temporarily suspended.

Activity prevailed throughout the year in industries in which the consumption of oils and fats is usually heavy. During 1941 the use of these products showed a considerable increase over recent preceding years. The defense program accounted for abnormally large takings in some instances but consumption also expanded noticeably in branches of industry which were not affected to an important extent by defense activities. In the soap industry, which consumes large quantities of oils and fats, the use of some of these raw materials in 1941 was much larger than in the previous year when consumption exceeded all former records. The total disappearance of oils and fats into the domestic market during the first nine months of 1941 was 7,500,000,000 pounds.

According to a report from an authoritative source, this showed an increase of 17 percent as compared with the corresponding period in the previous year. Although business among distributors in the local market, as already intimated, was curtailed during the latter part of the year by uncertainty concerning price ceilings and other government regulations, consumption continued on a large scale with the indications apparently pointing to very heavy takings during the early months of 1942, if not for a considerably longer period, despite official restrictions of one kind or another designed to prevent speculation and a spiraling of prices.

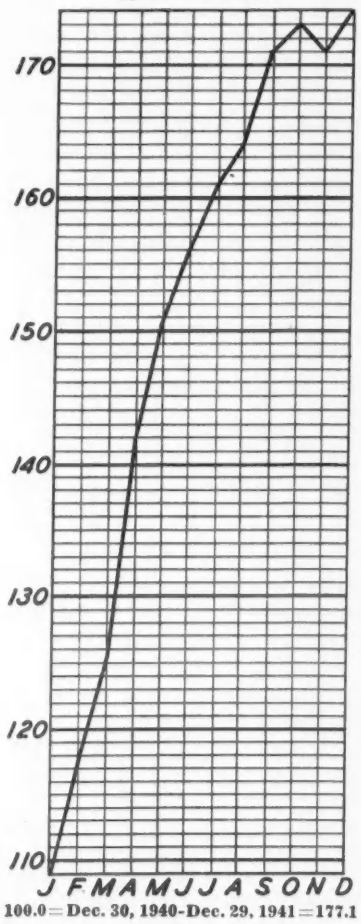
Consumption Trends

The disappearance of oils and fats into consuming channels in this country during the year just closed was estimated to be substantially greater than in 1940, when the consumption, exclusive of butter, was approximately 7,500,000,000 pounds. Statistics for the entire year will not be available until next month. Estimates of consumption for 1942 are of little value at this time, especially in view of the war, but predictions have been heard that the 1942 requirements of consumers will show a further substantial increase over the year just closed. More than 96 percent of the total consumption of fats and oils, it is pointed out in an official report, is confined to sixteen major forms, of which the most important are lard, cottonseed oil and inedible tallow and grease. These are all mainly of domestic origin, although considerable Argentine, Australian and New Zealand tallow was consumed in this country last year and further importations are expected in 1942.

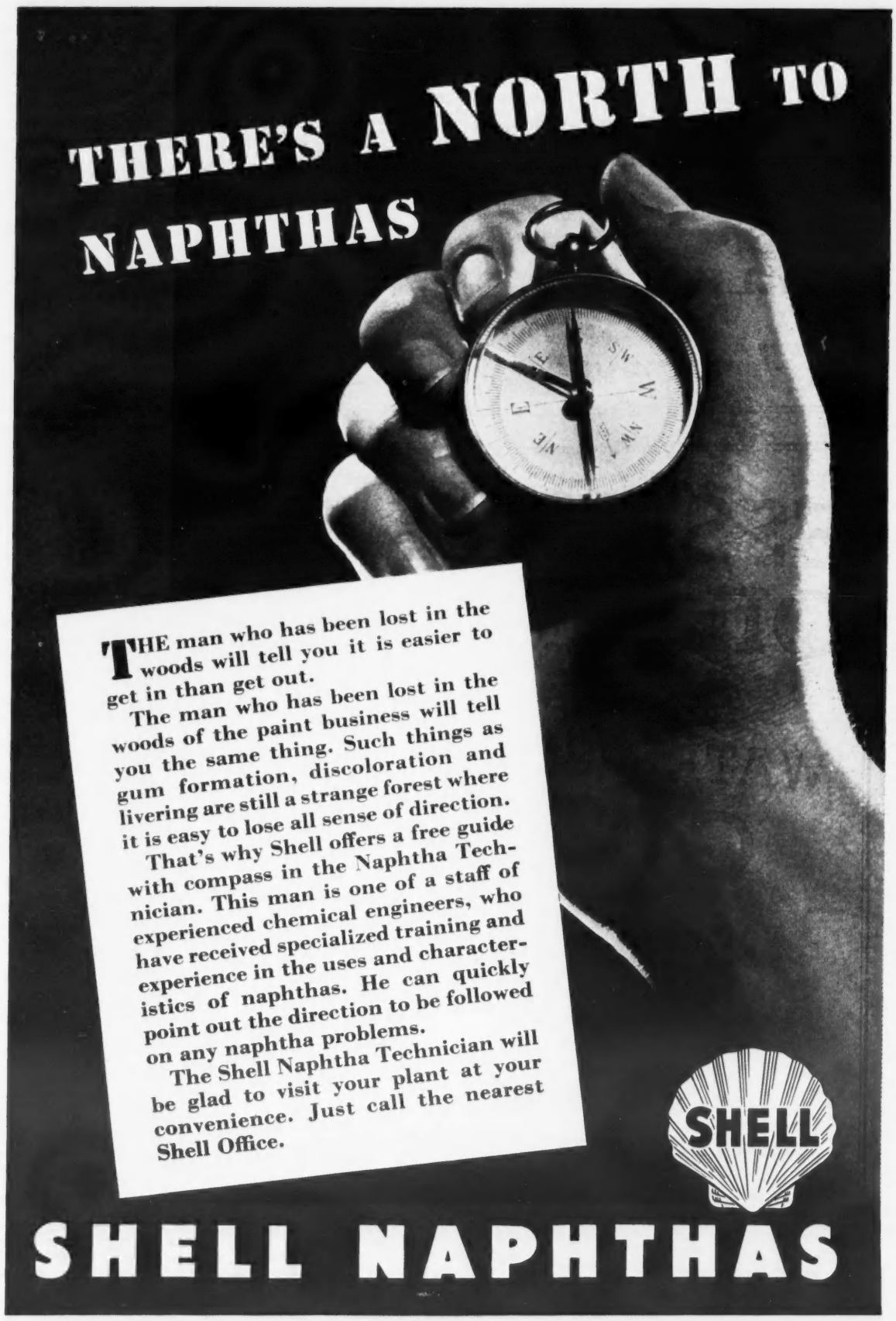
Following these leaders in order of their relative disappearance into consuming channels are coconut oil, linseed oil, marine animal oils, which include whale, menhaden, sardine and cod oils; soybean oil, palm oil, corn

Oils, Fats, and Waxes Price Trend Over 1941

(Based on monthly averages for 23 typical materials)



100.0=Dec. 30, 1940-Dec. 29, 1941=177.1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oil, tung oil, edible tallow, peanut oil, castor oil, olive oil, babassu oil, and perilla oil. The edible oils find their way into salad oils, cooking oils, shortening and margarin, and it is contended that consumption in the edible field, as a result of the war, will show a greater increase than was expected prior to the entrance of this country into the war. The manufacture of soap, soap powder and cosmetics absorb a substantial amount of the inedible fats and oils, while into the production of paints, varnishes and printing inks go linseed, tung, perilla, fish, soybean and castor oils.

Lard Exports

As lard is one of the most important of the domestic fats it is of interest to note that the abnormally high prices prevailing for that commodity last year were traceable in no small measure to heavy purchases by the government, especially for operations under the lend-lease act which permitted very large shipments to England. There was also heavy buying for government account at intervals during the year for relief distribution in this country. The heavy export movement, however, was a leading feature of the lard situation during the year, the shipments being on a scale sufficient to bring about a material decrease in stocks in cold storage warehouses in various parts of the country. It is expected that during 1942 United States exports to Britain under the lend-lease program will amount to about 650,000,000 pounds.

In 1940 the total lard exports from the United States were only about 200,000,000 pounds, but the present and prospective heavy exports are rapidly absorbing a production equal in volume to former years, when exports of 600,000,000 to 800,000,000 pounds took half the annual output. On December 15 of last year the stock of lard in Chicago had fallen to about 115,000,000 pounds, compared with about 200,000,000 pounds on June 15. During the last quarter of 1941 the government's purchases of lard for relief distribution ranged at times from 7,000,000 to 15,000,000 pounds weekly. For relief and lease-lend purposes the government also made liberal purchases of shortening, oleo oil and soybeans.

Cottonseed oil, ranking next in importance to lard among the edible oils and fats, also presented features of unusual interest during the past year. Speculation for a rise in the local market for refined oil futures was active, especially during the second and third quarters of the year, operators being favored by a curtailment of importations of foreign cottonseed oil and other vegetable products which compete with that oil, a sharp increase in the domestic consumption of cottonseed oil and indications that the production of cotton in 1941 would fall considerably below the previous year and perhaps fail to provide sufficient seed to enable crushers to produce enough oil to meet what promised to be a season in which an unusually large output of cottonseed oil would be needed.

Despite a rapid and marked advance in prices, consumption of cottonseed oil as revealed in the monthly reports of the United States Bureau of the Census exceeded expectations, notwithstanding that importations of palm and coconut oils proved to be larger than had been anticipated and that the output of soybeans and soybean oil in this country were of record-breaking proportions.

Cotton Crop

The output of cottonseed turned out to be considerably smaller than had been estimated as a result of adverse weather conditions during the cotton growing season and unusually heavy damage to the cotton crop from boll weevil and other pests. The quantity of cotton ginned for the season to the middle of December was only 9,915,000 bales against 11,430,454 bales up to the same time last season. The final ginning returns for the season are usually not available until some time in March. From the middle of December to the completion of ginning in the 1940-41 season the quantity of cotton ginned was 847,516 bales. If the same quantity is ginned during the remainder of the current season the production of cotton for the present season will amount to 10,762,633 bales or 1,495,337 bales less than was produced in the previous crop year.

There is a belief among many, however, that the decrease in cotton production this season as compared with last season will be greater than 1,495,337 bales as picking late in December was reported to have been finished over much of the cotton belt, with the work nearing completion in the Northern sections. Some estimates put the production of cotton for the season at around 10,250,000 bales to 10,500,000 bales, against 12,297,970 bales in the previous season.

Consumption of refined cottonseed oil during the season ended with July, 1941, was 3,265,540 barrels. With the indications pointing to a production of cottonseed and cottonseed oil during the current season considreably smaller than the consumption in the previous year, sentiment in oil trade circles in all parts of the country, not unnaturally, became decidedly bullish. In the South seed prices early in the season rose to $60 to $65 per ton.

There was a recession in December to around $50 per ton but this setback was attributed by some mainly to the marketing of a lower grade of seed, the bulk of the high quality product having been shipped to the mills earlier in the season.

However that may be, crushers practically withdrew all offerings of oil when ceiling prices were announced, and much resentment appeared to have been created in the South by the action of the Office of Price Administration. Many of the mills closed down, contending that on the basis of prices prevailing for seed, cottonseed oil could be produced only at a considerable loss. Crude oil was reported to have sold in the South in October at around 13 cents per pound as compared with 4½ cents per pound a year earlier.

Chinawood Oil Imports

Among the drying oils, chinawood was a feature of interest throughout the year owing to increasing difficulty as the year advanced in securing supplies abroad as a result of the war in China. It was quoted in New York in January at 26¼c. per pound. By December the price had risen to 35c., or the highest figure recorded for many years. The bulk of the oil reaching this country last year was under the control of an agency representing the Chinese government and it was contended that but for this fact the oil would have soared to considerably higher levels. The upward price movement was halted late in December by the issuance of ceiling prices for all oils and fats.

The shortage and high cost of chinawood oil were reflected in a sharp increase in the consumption of substitutes, one of these being dehydrated castor oil which was used extensively in the paint trade. Oiticica oil was also in active demand during the year as a result of the chinawood situation but importations of the former product from Brazil were hampered by the lack of adequate ocean freight room, and the market here at times was bare of supplies. Compounds of chinawood oil, linseed oil and other oils also met with a good demand.

Consumption of linseed oil was unusually heavy throughout the year owing partly to increased takings in defense industries and also because of the shortage of other drying oils. During the nine months of 1941, according to official statistics consumption of linseed oil was approximately 392,000,000 pounds, or about 106,000,000 pounds more than in the same time in the previous year. The linseed oil trend was upward much of the time, the price rising from 8½c. per pound in January to 10½c. in September after which there was a temporary setback on a trade agreement with Argentina which provided for a reduction in the duty on importations of flaxseed into this country of 50 percent. This action brought new business in linseed oil practically to a halt although consumption continued heavy.

Linseed oil producers experienced little difficulty in securing ample supplies of flaxseed last year despite the heavy increase in consumption of oil which made it necessary to run the mills at capacity during much of the period. Flaxseed production in this country was large, the output for the year being 31,485,000 bushels as compared with 30,886,000 bushels in

the previous year, while shipments from Argentina to the United States, despite government restrictions on trading and the shortage of ocean tonnage, showed a marked increase over the previous year, the total exports to this country last year being not far from 23,000,000 bushels, or about 10,000,000 bushels more than in the previous year.

Flaxseed Supplies

At the close of the year supplies of flaxseed in Argentina ports were unusually large, amounting to approximately 27,600,000 bushels, or about 23,000,000 bushels more than at the close of the previous year. The outlook, therefore, appeared to be for liberal supplies of flaxseed for the requirements of linseed oil producers during 1942. The action of our government in the summer of last year in fixing a loan value to American farmers of $1.85 per bushel on flaxseed seemed to insure efforts to produce a large crop during the coming season.

Planting of the 1942 flaxseed crop in California and Arizona was making good progress at the close of last year, with the indications pointing to an area about the same as last season, while the outlook seemed to be for an increase in the area during the coming season in the large producing states of the Northwest, except in portions of Minnesota where there appears to be a possibility that the acreage devoted to wheat will be increased at the expense of flaxseed. The first official estimate of the new Argentina flaxseed crop which is now moving to market is 66,929,000 bushels. This compares with a first estimate in the previous season of 78,740,000 bushels and a final estimate of 57,480,000 bushels. If the new crop proves to be about the same as last year the total supply in Argentina for 1942, with the carryover from last season, will amount to 85,000,000 bushels, an abnormally large supply.

What the effect will be on the domestic markets for oils and fats of the reduction in the duty on importations into this country from Argentina remains to be seen, but the impression among some is that it will not be important or lasting owing to the existing shortage of many products and the prospects that domestic consumption in 1942 will be very heavy. In the case of flaxseed it is pointed out that the reduction in the duty has already been materially offset by an increase in the price of flaxseed at Buenos Aires where the market since the Argentina government placed it under official control in November has advanced approximately 30 cents per bushel. The trade agreement with Argentina also includes a reduction of 50 percent in the duty on importations into this country of tallow, neatsfoot oil, neatsfoot oil stock, oleo oil, oleostearin and sunflower seed oil but the importations thus far have not been heavy although considerable tallow was sold here in November and December at below the prices prevailing for domestic product which is abnormally high.

Neatsfoot oil and neatsfoot stock importations have not reached this country in sufficient volume from Argentina to have any effect upon the market, as supplies, especially in the case of high grade neatsfoot oil, were difficult to obtain at times during the closing months of last year when prices were extremely high with the oil under full priority control. Under normal conditions the United States is an exporter of neatsfoot oil, but consumption has overtaken domestic production and has also promptly absorbed the oil arriving here from South America. The increase in consumption of this oil is traceable in part to the defense program, the Chemical Warfare Service having developed a compound with a neatsfoot oil base which is invulnerable to mustard and other poisonous gasses. It is in paste form and is used on the shoes of soldiers as a protective measure in chemical warfare.

Fish Products

Fish products were no exception to the general rule in the matter of abnormally high prices for oils and fats during the past year, the trend in all instances being strongly upward. Sardine oil was the leading feature of this branch of the market. Sales were reported late in the year at from 62c. to 65c. per gallon in California, or the highest prices recorded for many years. Formerly used mainly by manufacturers of paints, this oil is now consumed in the production of vitamins, and competition from the latter class of buyers accounts in no small measure for the high prices now prevailing for this oil.

Fishing results during the season were good but operations were curtailed late in the year by the outbreak of war in the Pacific. Many of the fishing boats operating in Northern California waters were taken over by the government for war purposes though some of these vessels were released later. During the first four months of the season ended with November production of sardine oil amounted to 1,500 tankcars, or about the same as produced in all of the previous season. Total production for all of the current season is estimated at about 2,500 tankcars, but it now appears probable that owing to the war and curtailed production some consumers will not receive the oil contracted for.

Sperm oil was placed under full priority control by the government on October 16 as this oil is vital in national defense. Crude whale oil was in limited supply throughout the year. Several small sales were reported at high prices but there has been no open market here in recent years, importations having been largely curtailed by the revenue act of 1934 which placed a heavy tax on imports, while domestic production has been negligible following the Antarctic season of 1939-40.

Beeswax

Wax history in 1941 was made in part by war-time conditions and in part by causes prevalent in various sources of supply. Speculation in primary markets was not entirely lacking, and, in the instance of carnauba wax, shippers' control of stocks and values in Brazil were definitely a major influence on creation of very high spot prices to the manufacturing consumers.

The Office of Price Administration acted on December 26 to secure control over values. On that date the OPA wired all wax factors requesting that they make no sales of carnauba, bees, candelilla, and ouricury waxes at prices in excess of the f.o.b. New York quotations in force on December 18.

The prices on that date, plus OPA sales regulations, met with substantial disagreement on the part of many wax houses. Protests were promptly filed in Washington and OPA made arrangements at which the trade might present its position and data early in 1942.

This country depends heavily on imports of African crude beeswax for

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supplies, and war definitely made transactions, either with Portuguese factors or African shippers, difficult and, at times, impossible. Weeks passed, at times, during which not a pound of wax reached here and the spot market lacked quotations on crude on numerous occasions.

The United States draws crude beeswax from Argentina, Belgian Congo, Brazil, Chile, Costa Rica, Cuba, Dominican Republic, Haiti, Mexico, Morocco, Nigeria, Peru, and Salvador.

Total imports for January-September, 1941, were 4,390,404 pounds of crude. This compared with 3,793,265 pounds in the corresponding nine months of 1940, and with the 1940 twelve-month total of 4,815,920 pounds.

The price rise on crude Brazilian wax on spot was 19c. per pound during the entire year. White bleached beeswax in slabs at the year-end was 19½c. over January levels.

Candelilla

Mexican candelilla advanced 14c. per pound over the year. A part of this rise was caused by advances in the price of Mexican producers, but, also, a good share of the upping of values came following a fire aboard a ship discharging in Brooklyn. Loss of this wax created a severe shortage and unsold wax on spot appreciated substantially in value. The very high prices for carnauba also increased consumption of candelilla and contributed its share to the advance in quotations.

Carnauba

Chalky carnauba wax at the end of the year was 19c. over January quotations, while No. 1 yellow rose 27c. over the year. It is difficult to account for this disproportionate rise in yellow wax prices, but such is the record. Imports for the first nine months of 1941 totaled 17,121,521 pounds, against 12,958,480 pounds in the corresponding period of 1940, and with the 1940 twelve-month total of 16,925,931 pounds.

Japan Wax

Japan wax advanced 12c. per pound in 1941, the rise being speeded following the total stoppage of exports from Japan, the result of the order of President Roosevelt ending all commercial relations with Nippon. Developments of substitutes eased the situation that had caused elimination of Japanese shipments.

Ozokerite

No general supply of montan and ozokerite waxes was available at any time during the year. These materials originate in Poland and Germany and, of course, little, if any, wax was obtainable because of the war.

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Plant Expansions: 1941

—Continued from page 48

Fine Chemicals:—Chas. Pfizer & Co., New York, manufacturing chemists, expended $1,000,000 on expansion and improvements at its Brooklyn plant.

Manganese:—Production on a pilot plant scale started by the government at Boulder City, Nev., to experiment with low-grade ore.

Manganese Chloride:—New York-Ohio Chemical Company, Lewiston, N. Y. formed with a capital of $500,000 for production of manganese chloride and other chemicals.

Mercurials:—Stege Chemical Company, Richmond, Calif., started commercial production of mercurials.

Olive Oil Foots, Superior Olive Oil Products:—Erected plant in Fresno, California, to produce 125,000 gallons of olive oil foots.

Pharmaceuticals:—Merck & Co., manufacturing chemists, Rahway, N. J., building plant at Elkton, Va., for production of pharmaceuticals and vitamins.

Phenol:—Solvay Process Company, New York, announced plans to synthesize phenol at Syracuse, N. Y.

Phthalic Anhydride:—Barrett Division of Allied Chemical & Dye Corporation, New York, acquired land adjacent to its Frankford, Philadelphia, plant for expansion of its coal-tar business and for doubling facilities for phthalic anhydride production.

Potash:—Potash Company of America, Carlsbad, New Mexico, enlarged its plant facilities for muriate of potash production.

Potash Perchlorate:—Cardox Chemical Company, Chicago, ordered expending of $250,000 for production of potash perchlorate.

Quinine:—American Quinine Company, New York, formed for extraction of quinine from cinchona bark from South America.

Rubber: — Thiokol Corporation, Trenton, N. J., opened, wth the Dow Chemical Company, a new plant in Midland, Mich. New plant was understood to have a capacity of more than 150,000 pounds monthly, plus other plants net well approximate 6,000,000 pounds monthly. Plans were being formed to further increase output by 50 percent.

Silicates: — Philadelphia Quartz Company of Calif., started erection of a $250,000 silicate plant in Tacoma, Washington.

Soybean Protein:—Drackett Company, Cincinnati, began commercial production of soybean protein, as substitute for casein.

Thiocyanates: — Technical Associates, Inc., New York, started commercial production of ammonia, potash, and soda thiocyanates.

Toluol:—Shell Oil Company constructing toluene plant at its Wood river, Illinois refinery. Capacity to approximate 4,000,000 gallons, bringing the company's output to 8,000,000 gallons.

Tung Mill:—Resor Tung Plantations Company, constructed a tung oil mill at Hintonville, Miss.

Vitamin Products: — National Oil Company, Harrison, N. J., constructed plant in Richmond, Calif., for vitamin products.

Products -6 i 5, SHRDL DW DW

Wax:—Koster-Keunen Wax & Oil Products Company, Sayville, L. I., was formed for production of American ozokerite wax, naphthentic acid, and naphthentic soap.

Anilin:—Dow Chemical Company, Midland, Mich., extended $1,086,000 phenol and monochlorobenzol and other production.

Ammonia, Soda Nitrate: — Solway Process Company, Syracuse, N. Y., spent $1,388,000 for plant expansion on ammonia and soda nitrate production.

Calcium Carbide: — Air Reduction Company, New York, expended $2,500,000 for erection of plant in Louisville, Ky., for production of calcium carbide.

Chlorinated Solvents:—E. I. duPont de Nemours & Co. outlined plans for construction of a plant for the production of a chlorinated hydrocarbon solvents at Wyandotte, Mich.

Chemicals:—Carbide & Carbon Corporation, South Charleston, W. Va., spent $1,500,000 for plant expansion.

Illmenite:—Titanium division of the National Lead Company purchased illmenite deposits held by MacIntyre Iron Company, located in the Adirondack Mountains, at Tohawus, Essex County, N. Y.

Containers:—Continental Can Company planned erection of a plant in Mankato, Minn.

Magnesium:—Basic Magnesium, Inc., Cleveland, let a $3,000,000 contract for construction of a magnesite treating plant near Luning, Nev. This plant will convert magnesite from a deposit at that point into magnesium oxide. The latter salt will then be sent to a plant being built at Las Vegas for conversion into metallic magnesium.

Magnesite: — Northwest Magnesite Company, jointly owned by the Harbison-Walker Refractories Company and the General Refractories Company, Philadelphia, started construction of a plant in Cape May, N. J.

Malic Anhydride:—National Aniline & Chemical Division of Allied Chemical & Dye Corporation, New York, expended $101,000 on increased output of malic anhydride.

Phosphate Salts:—Monsanto Chemical Company started erection of a plant in Trenton, Mich., for production of phosphate salts.

Phthalic Anhydride: — Reichhold Chemicals, Inc., Detroit, spent $971,000 for expansion of phthalic anhydride and synthetic resin production.

Metals Flotation: — National Lead Company, subsidiary, Combined Metals Reduction Company, placed in operation its new $600,000 selective flotation plant near Pioche, Nev.

Tricresyl Phosphate: — Ohio Apex, Inc., Nitro, W. Va., planned $55,000 expansion.

Imports into the United States

Industrial Chemicals

	1941.*	1940.	1939.
Acid, acetic.....lb.	3,368,000	1,438,956	1,821,638
Sulphuric .....lb.	4,581,102	4,205,730	5,400,035
Ammonium chloride....lb.	460,992	8,487,112	2,703,401
Arsenic, white.....lb.	15,155,426	29,347,810	19,857,310
Bleaching powder.....lb.	200,193	1,323,103	417,436
Cobalt oxide.....lb.	38,002	680,644	756,759
Cryolite .....ton	13,329	10,210	25,858
Fluorspar .....ton	6,527	14,555	10,601
Gypsum, crude.....ton	775,209	1,167,927	1,254,652
Magnesite, crude.....lb.	.....	1,137,058	44,180
Calcined .....lb.	1,653,663	4,435,222	1,855,909
Deadburned .....lb.	73,147,096	88,839,378	61,902,112
Potash, caustic.....lb.	23,323	663,135	91,647
Potassium carbonate....lb.	7,994	433,943	17,077
Chlorate and Perchlor.lb.	245,027	11,955,567	3,578,621
Salt cake.....ton	54,912	132,868	65,203
Sodium chlorate.....lb.	2,600	3,759,190	1,835,500
Cyanide .....lb.	52,315,922	42,685,775	50,410,497
Ferrocyanide .....lb.	.....	1,411,683	64,815
Nitrite .....lb.	.....	49,595	.....
Sulphate .....ton	6	5,321	30

Coaltar Chemicals

	1941.*	1940.	1939.
Oil, creosote.....gal.	12,971,656	51,876,602	39,009,788

Dyestuffs, Textile, and Leather Chemicals

	1941.*	1940.	1939.
Gambier .....lb.	6,027,058	5,562,019	4,970,263
Logwood .....ton	9,805	6,753	9,645
Mangrove extract.....lb.	12,104,700	14,733,961	15,347,740
Myrobalans .....ton	2,323	16,551	15,016
Nutgalls .....lb.	2,242,310	2,764,406	3,501,777
Quebracho extract.....lb.	167,836,586	153,032,380	111,067,671
Wood .....ton	4,942	27,757	8,751
Starch, potato.....lb.	2,238	10,983,533	1,667,243
Except potato.....lb.	40,956	1,024,056	350,480
Sumac .....ton	2	2,112	599
Valonia .....lb.	.....	17,192,050	8,652,249
Wattle bark.....lb.	17,253,490	11,463,259	16,693,882

Paint, Varnish, and Lacquer Materials

	1941.*	1940.	1939.
Asphaltum, natural....ton	7,916	10,331	65,935
Casein .....lb.	29,940,133	24,522,520	15,832,462
Chalk, crude.....ton	40,630	59,653	61,477
China clay.....ton	59,772	102,407	94,256
Glue stock.....lb.	21,061,987	18,253,266	27,780,475
Gum, Dammar.....lb.	19,138,415	19,110,593	17,334,581
Kauri .....lb.	533,690	1,561,135	1,620,632
Iron oxide pigments....lb.	11,856,283	16,913,722	19,329,418
Lac, crude.....lb.	22,352,636	20,118,963	23,215,039
Mica, unmanufactured..lb.	3,002,563	9,461,081	7,656,919
Ochers and siennas.....lb.	424,714	9,703,804	5,828,450
Shellac, unbleached....lb.	29,971,848	29,990,213	27,682,235
Zinc oxide pigments....lb.	235,086	3,101,129	635,981

Oils, Fats, and Waxes

	1941.*	1940.	1939.
Acid, stearic.....lb.	102,472	560,996	1,277,662
Castor beans.....lb.	289,407,881	162,610,861	237,788,672
Copra .....lb.	435,522,182	430,053,544	615,368,128
Flaxseed .....bu.	11,361,970	16,028,133	11,825,438
Grease, wool.....lb.	796,613	2,877,202	4,177,707
Oil, chinawood.....lb.	25,894,183	78,717,634	97,048,595
Coconut, edible.....lb.	298,541,967	336,795,877	370,682,720
Cod, inedible.....gal.	652,836	480,404	2,161,940
Codliver, inedible....gal.	1,230,375	2,114,392	6,670,274
Corn, edible.....lb.	1,357,543	426,049	13,626,024
Cottonseed, edible.....lb.	4,123,396	12,030,600	29,454,225
Linseed .....lb.	90,222	49,071	10,657
Olive, edible.....lb.	8,434,150	50,080,121	62,866,228
Sulphured .....lb.	4,026,552	28,180,324	24,479,898
Other inedible.....lb.	694,167	11,303,888	5,135,843
Palm, edible.....lb.	222,901,803	286,416,373	225,037,074
Palmkernel, edible....lb.	.....	.....	1,911,060
Inedible .....lb.	.....	325,226	.....
Peanut, edible.....lb.	2,253,422	3,119,088	3,779,415
Perilla .....lb.	5,020,775	51,284,120	11,347,270
Rapeseed, inedible....lb.	1,657,928	1,185,492	1,722,518
Seal, inedible.....gal.	3,094	.....	.....
Soybean .....lb.	758,578	4,125,526	4,848,070
Sunflower, edible.....lb.	885	216	.....
Sunflower, inedible...lb.	10,462	193,927	.....
Whale, inedible.....gal.	252,924	2,967,760	2,705,162
Palmkernels .....lb.	13,329,033	10,118,336	29,731,023
Poppy seed.....lb.	3,001,716	5,814,884	6,065,541
Rapeseed .....lb.	3,235,703	7,540,669	5,018,872
Sesame seed.....lb.	6,508,502	12,241,831	14,598,311
Tallow, inedible.....lb.	16,198,115	1,368,496	1,496,474
Vegetable .....lb.	1,757,825	2,564,999	282,744
Wax, bees, crude.....lb.	4,390,404	4,815,920	4,714,632
Carnauba .....lb.	17,121,521	16,358,508	16,925,931
Mineral .....lb.	78,987	8,010,589	1,361,254
Vegetable .....lb.	10,186,627	8,021,408	9,206,652

Drugs and Fine Chemicals

	1941.*	1940.	1939.
Acid, tartaric.....lb.	7,164	115,858	2,205
Agar .....lb.	552,864	497,117	634,555
Argols .....lb.	19,935,274	17,370,292	23,805,781
Cacao butter, edible....lb.	983,117	10,780	353,444
Camphor, nat., crude..lb.	133,343	1,156,882	712,963
Refined .....lb.	519,431	818,055	397,209
Cream of tartar.....lb.	44,423	5,877	.....
Gelatin, inedible.....lb.	11,380	39,178	92,255
Glycerin, crude.....lb.	6,691,695	10,987,731	9,096,283
Refined .....lb.	110,930	330,078	298,198
Gum, arabic.....lb.	7,361,646	14,055,415	9,199,623
Chicle, crude.....lb.	10,991,963	12,416,327	14,679,050
Karaya .....lb.	6,921,260	7,701,351	7,661,622
Tragacanth .....lb.	2,166,270	3,712,716	3,064,676
Iodine, crude.....lb.	678,865	200,000	1,244,146
Licorice extract.....lb.	88,128	345,296	466,269
Menthol .....lb.	329,757	406,581	419,134
Opium, crude.....lb.	202,099	128,434	180,711
Quicksilver .....lb.	66,803	265,944	12,971
Quinine sulphate.....oz.	6,119,150	1,386,016	2,464,304
Santonin and salts.....lb.	3,458	3,048	1,075

Botanical Drugs, Spices, and Gums

	1941.*	1940.	1939.
Cinchona bark.....lb.	4,038,541	5,418,271	2,029,648
Hop extract, lupulin...lb.	3,196	34,493	2,442
Hops .....lb.	3,526,553	8,190,219	3,610,847
Licorice root.....lb.	8,728,917	56,255,106	62,330,968
Psyllium seed.....lb.	1,977,468	2,183,742	2,437,875
Pyrethrum flowers.....lb.	5,168,506	12,591,210	13,569,300
Senna leaves.....lb.	554,913	1,979,625	3,027,486

Essential Oils

	1941.*	1940.	1939.
Oil, Bergamot.....lb.	2,837	211,181	84,633
Cassia or cinnamon...lb.	309,057	443,566	468,186
Citronella and lemon grass .....lb.	4,012,416	3,274,886	3,282,916
Geranium .....lb.	30,616	227,479	164,301
Lavender .....lb.	166,954	413,423	231,545
Lemon .....lb.	16,577	149,419	88,031
Lime .....lb.	105,156	134,326	140,668
Orange .....lb.	136,168	237,951	198,748
Rose .....oz.	42,467	66,551	39,812
Sandalwood .....lb.	24,265	8,622	5,449

Petroleum Products

	1941.*	1940.	1939.
Paraffin .....lb.	6,177,109	38,344,723	74,640,812
Petroleum jelly.....lb.	630	2,011	11,516

Fertilizer Materials

	1941.*	1940.	1939.
Ammonium sulphate...ton	14,254	110,761	42,234
Blood, dried.....ton	11,716	13,847	11,635
Calcium cyanamide....ton	124,726	132,698	118,363
Nitrate .....ton	.....	19,255	1,377
Guano .....ton	16,522	5,151	785
Potassium chloride, crude. ton	13,671	84,361	136,153
Saltpeter .....ton	22,736	57,703	50,289
Sodium nitrate.....ton	443,005	604,390	664,421
Urea and calurea.....ton	.....	836	.....

* Nine months; later data unavailable; records for 1939 and 1940 are for the full year.

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Exports from the United States

Industrial Chemicals

	1941.*	1940.	1939.
Acetic anhydride.....lb.	138,094	290,107	540,237
Acetic, acid.....lb.	4,955,796	6,035,000	1,794,089
Boric.....lb.	19,927,384	19,535,617	18,572,635
Muriatic.....lb.	5,417,226	7,312,845	7,374,937
Aluminum sulphate.....lb.	69,271,693	87,230,520	69,467,086
Ammonia, anhydrous...lb.	9,834,794	10,399,947	4,836,040
Borax.....lb.	57,491,539	128,626,162	182,277,845
Calcium arsenate.....lb.	2,675,097	4,879,391	6,731,102
Carbide.....lb.	55,326,548	32,101,240	8,328,059
Chloride.....lb.	31,921,261	17,813,853	38,764,541
Carbon bisulphide.....lb.	7,023,431	7,077,482	5,503,066
Chlorine.....lb.	6,759,564	10,010,610	12,000,749
Copper sulphate.....lb.	47,484,360	55,531,046	29,239,575
Formaldehyde.....lb.	1,849,433	5,709,520	3,925,762
Gypsum, crude.....ton	8,053	4,651	9,234
Lead, arsenate.....lb.	3,749,115	2,900,250	1,712,583
Nicotine sulphate (40%).lb.	472,760	497,282	501,314
Salt.....lb.	175,613,852	294,080,470	248,545,168
Soda ash.....lb.	139,803,699	176,966,998	160,113,479
Caustic.....lb.	189,841,739	209,932,472	260,999,692
Sodium bicarbonate.....lb.	24,687,907	22,600,719	31,713,315
Cyanide.....lb.	2,963,724	12,816,205	2,338,620
Phosphates.....lb.	6,093,118	8,051,030	8,905,718
Silicate.....lb.	13,586,364	15,953,722	16,038,869
Sulphur, crude.....ton	474,551	741,968	627,819

Coaltar Chemicals

	1941.*	1940.	1939.
Benzol.....gal.	2,292,566	7,922,728	12,990,391
Coaltar.....gal.	4,064,460	1,371,406	7,620,209
Creosote oil.....gal.	825,924	84,306	2,397,796
Phenol.....lb.	2,086,769	4,304,357	2,058,398
Toluol.....lb.	19,375,338	59,516,672	†
Xylol.....lb.	430,619	865,268	†

† Not separately recorded.

Dyestuffs, Textile, and Leather Chemicals

	1941.*	1940.	1939.
Chestnut extract.....lb.	14,448,586	22,587,410	7,731,033
Dextrin.....lb.	7,186,417	13,671,297	8,616,761
Logwood extract.....lb.	886,009	594,216	543,375
Sodium chromates.....lb.	12,259,069	22,583,006	10,855,420

Drugs and Fine Chemicals

	1941.*	1940.	1939.
Corn syrup.....lb.	25,230,333	93,901,325	49,480,916
Gelatin.....lb.	1,524,037	1,180,274	361,418
Glycerin.....lb.	6,775,350	12,378,489	7,398,681
Methanol.....gal.	377,030	2,157,500	1,219,813
Quicksilver.....lb.	146,817	730,877	91,789

Paint, Varnish, and Lacquer Materials

	1941.*	1940.	1939.
Acetone.....lb.	18,509,816	26,150,288	23,115,332
Alcohol, butyl.....lb.	3,873,392	4,874,870	7,618,568
Amyl acetate.....lb.	433,398	213,774	461,481
Black, carbon.....lb.	112,754,841	177,722,502	203,827,817
Butyl acetate.....lb.	4,319,365	6,318,685	6,828,283
Glue, animal.....lb.	1,447,222	1,458,609	1,429,343
Lampblack.....lb.	1,101,868	1,596,274	957,587
Lead, red.....lb.	4,099,590	2,672,141	2,647,536
White (carb., dry)....lb.	3,001,002	936,341	2,933,057
Litharge.....lb.	4,006,420	3,171,072	4,155,287
Lithopone.....lb.	33,907,410	28,596,721	9,690,621
Rosin, gum.....lb.	93,869,374	163,875,500	297,190,500
Wood.....lb.	87,928,655	145,588,000	170,642,500
Tar, wood.....lb.	17,781,294	33,413,894	18,347,068
Titanium dioxides.....lb.	11,899,169	9,923,385	8,638,565
Turpentine, gum spirit.lb.	2,817,995	4,998,736	9,841,527
Wood.....lb.	1,214,901	1,830,332	2,022,868
Zinc oxide.....lb.	10,808,056	6,477,138	6,970,249

Oils, Fats, and Waxes

	1941.*	1940.	1939.
Acid, stearic, inedible..lb.	5,409,822	3,296,347	1,252,002
Cocoa butter, edible....lb.	6,016,315	18,729,528	13,586,179
Lard.....lb.	251,427,403	201,313,796	277,271,534
Oleostearin.....lb.	315,529	89,197	153,317
Oleo stock.....lb.	1,670,181	1,636,854	4,893,565
Oil, castor.....gal.	104,436	161,208	168,464
Coconut, edible.....lb.	12,368,079	15,160,654	10,127,765
Inedible.....lb.	33,578,974	24,372,191	15,263,355
Corn, edible.....lb.	188,688	205,384	179,584
Cottonseed, crude.....lb.	2,860,435	1,588,606	3,879,739
Refined.....lb.	8,813,658	12,589,602	9,081,520
Linseed.....lb.	4,453,430	4,769,632	2,566,060
Neatsfoot.....lb.	338,119	437,948	615,072
Oleo.....lb.	461,948	1,233,914	3,466,157
Peanut, edible.....lb.	6,623,764	2,853,425	325,031
Pine.....lb.	977,871	2,041,351	1,682,163
Red (oleic acid).....lb.	1,420,499	2,034,276	1,128,868
Soybean, edible.....lb.	10,399,519	15,953,901	12,110,936
Tall.....lb.	4,548,030	16,446,841	9,819,353
Soybeans.....lb.	9,373,872	146,465,418	628,592,331
Tallow.....lb.	101,171	122,345	275,999
Inedible.....lb.	1,708,597	2,009,589	2,042,227

Botanical Drugs

	1941.*	1940.	1939.
Ginseng root.....lb.	69,314	188,520	150,277

Essential Oils

	1941.*	1940.	1939.
Oil, peppermint.....lb.	192,702	315,830	396,073

Petroleum Products

	1941.*	1940.	1939.
Kerosene.....bbl.	1,053,790	3,138,819	7,994,124
Liquefied gases.....lb.	16,307,445	15,915,165	13,028,714
Naphthas, solvents, and similar light products... bbl.	208,353	291,673	1,564,365
Oil, white mineral (Med.) gal.	2,176,746	2,234,476	1,665,945
Paraffin wax.....lb.	132,538,274	189,810,988	232,519,030
Petroleum, crude.....bbl.	19,281,112	51,495,494	72,063,824
Petroleum jellies.....lb.	45,625,063	58,382,298	†

† Not separately recorded.

Fertilizer Materials

	1941.*	1940.	1939.
Ammonium sulphate...ton	62,951	150,852	46,664
Phosphate materials, other than superphosphate... ton	822,214	767,919	978,086
Potassic materials.....ton	61,689	83,089	122,098
Superphosphate.....ton	102,784	141,289	95,224

* Nine months; later data unavailable; records for 1939 and 1940 are for the full year.

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Trade Leaders Review and Forecast

V. A. Acer

Vice-President, Spencer Kellogg & Sons, Inc., Buffalo, N. Y.

In speaking of our industry we shall touch on linseed oil, coconut oil, castor oil, soybean oil, and chinawood oil.

Linseed oil business through 1941 has been excellent, and final statistics will probably show the biggest production and consumption of oil in the history of the United States. Prices have moved in a rather narrow range, at least compared to prices of other oils and fats. Our raw material, flaxseed, has been available in large quantities through a large United States crop and the availability of boats to carry Argentine seed to supplement the United States production. Argentina has had lots of seed and is carrying over into next year from 30,000,000 to 35,000,000 bushels. The prospects for 1942 are excellent as far as the availability of raw material is concerned. Argentina has with their carry-over and their new crop perhaps 85,000,000 to 90,000,000 bushels, with the United States almost the only customer for this seed. Consumption should be very large, perhaps even larger than 1941 but dependent upon the ability of linseed oil consumers in some cases to get other materials together with linseed oil. Civilian use of materials using linseed oil will probably be curtailed somewhat by war uses for protecting the vast war machine, and war supplies will be the greatest ever seen. Economic factors would seem now to indicate a reasonable price compared to prices of other oils, fats, and general commodities but restricted action by our government and that of Argentina may have more effect upon prices and supplies than do these economic factors.

Coconut oil business through 1941 was very good. Soap, confectioners, cracker and biscuit, and other industrial users enjoyed a very good business and used the record imports and production of coconut oil freely. Prices moved in a wide range from a trifle over 3 cents a pound f.o.b. Atlantic coast at the start of the year to 10 cents a pound which was the price of oil just before the OPA placed their ceiling on December 12. The outlook for 1942 is clouded by the war in the Far East which seems likely to seriously curtail or perhaps prevent imports of copra and coconut oil from that area so we shall doubtless have to do with much smaller supplies and curtail consumption. Economic factors would make prices higher but governmental control may here also be more important.

Castor oil has also enjoyed a record production and consumption in 1941. The textile industry, the artificial leather industry, and other normal castor oil users had excellent business. Added to this, the development and increased consumption of dehydrated castor oil which has been on the market but a few years was as great as the industry could take care of. Prices on castor oil developed a moderately rising trend through the year but were on the whole surprisingly stable. Incidentally, castor oil was not affected by the OPA ruling of December 12 as its price on that date was the same as it was on November 26 so that it has continued to move without interference. The outlook for 1942 is excellent as regards production and consumption. We look for a continuation of all uses of castor oil in as great or greater volume during 1942. Raw material supplies are abundant in Brazil. Its supply will be a question of transportation from the interior to the coastal points in Brazil to the United States. Pricewise, the outlook is firm but we would not expect anything too radical in the way of price advances.

Soybean oil has moved into consumption during 1941 about as rapidly as produced. Production has been the greatest ever witnessed. The amount of soybean oil produced and consumed was only limited by the crop of beans grown in 1940. The price trend in 1941 was upward, in fact sharply upward, in the last four months of the year. Prices in early December were beyond the ceiling prices fixed as of November 26 and it would seem reasonable to expect these prices to be adjusted upward. The price of soybean oil in relation to cottonseed oil was much wider than normal and it would be reasonable to expect soybean oil to sell closer to it in 1942 than it did in 1941. For 1942 we expect a greater production and consumption because of having 26,000,000 or 27,000,000 bushels more of beans to crush. These domestic oils will have to supplant some of the foreign oils which have been shut out and there will be an urgent demand for all the soybean oil that can be produced, with price trend naturally upward but perhaps governed by political regulations.

Chinawood oil has been throughout the year handicapped by extreme difficulty in bringing in supplies from China. The price and supplies have been controlled wholly by the Univeral Trading Corporation who have done well so far in taking care of the trade's requirements. The price trend has been upward although probably not so violently so as it would have been had it been left to the play of free economic forces. The outlook for 1942 is very dubious. It is hard to see how supplies can come in with any freedom and we must anticipate a curtailment of imports and of consumption.

E. M. Allen

President, Mathieson Alkali Works, Inc., New York

Our production facilities, capable of an annual output of more than 300,000 tons of alkali, were operating at capacity throughout most of 1941. There was a period during the Summer when shortage of water supply compelled us to curtail much needed production. During 1941, our principal problem dealt with production and the availability of raw materials and supplies. It has been particularly difficult for us to maintain elasticity in our supplies of containers and materials for those containers which we ourselves fabricate. Steel cylinders and various valves for liquid chlorine and anhydrous ammonia cannot be replaced within twelve to eighteen months after placing of orders and a serious shortage of this important equipment may develop. There is some tendency toward hoarding of these items, but careful management and the allocation plan now in effect on liquid chlorine will reduce this to a minimum. Sheet steel for alkali drums, cans for our specialties, burlap and paper bags are all scarce and must be ordered well in advance of our actual needs.

During the year, we built an addition to our Lake Charles, La., plant. This step in plant expansion provides us with a 40 percent increase in production facilities. This expansion was made in an effort to cope with the increasing demand for our products by the Southern paper and textile industries, particularly for our new synthetic saltcake, the increasing demand for which was caused by a shutting-off of imported material.

An ever-increasing amount of our production has been shipped directly to the Federal government and to consumers working on national defense contracts. This has made it necessary to curtail shipments to our nondefense consumers, and the latter were allocated tonnage on a percentage basis dependent on the material remaining after defense requirements had been met.

This heavy domestic demand allowed us to fill only a portion of export orders which were placed with us, the volume of which increased tremendously as a result of World War II. Virtually all of our export business is handled through the United States Alkali Export Associa-

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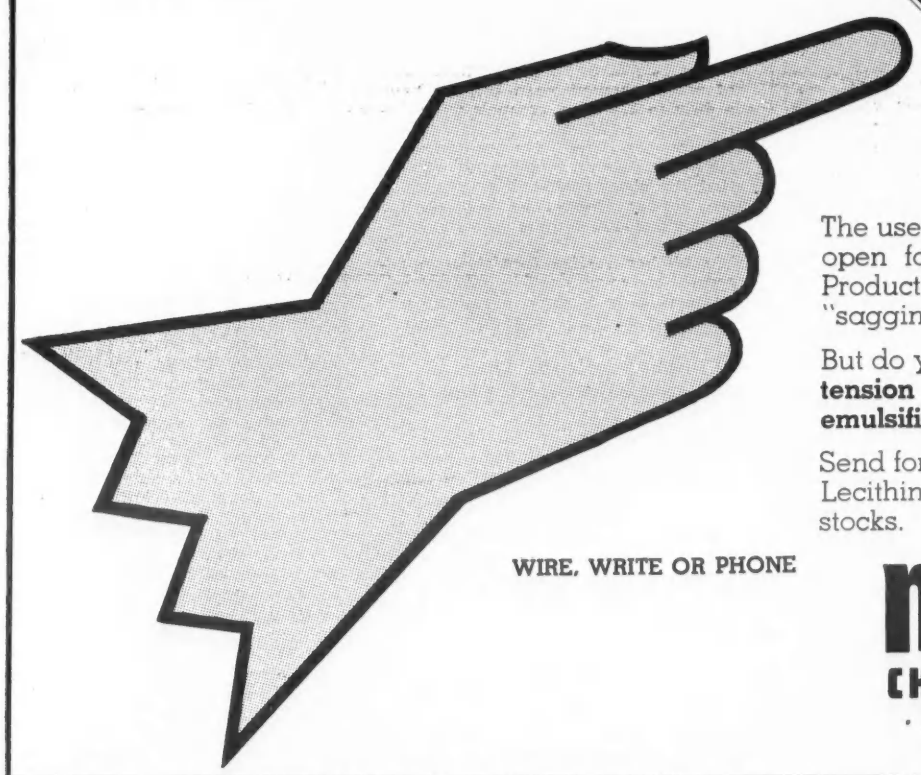

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tion, which, organized in 1919 under the Webb-Pomerene act, has established selling agencies throughout the world. Lend-lease and good-neighbor demands will probably control our export sales during 1942.

Our efforts in the research field were extended during the year, mainly with the idea of developing products which could be substituted by nondefense consumers for those products being diverted to national defense. The effectiveness of this program was reflected recently by our opening at Niagara Falls, N. Y., a new sodium chlorite plant, consumption of which is primarily in the textile and paper industries.

We consider the maintenance of consumer good-will of the utmost importance through these days of remote control. Our sales and technical service departments are valuable assets which we have built up by many years of careful and expensive management. We expect to continue to maintain regular contact with our consumers and to render all possible service and technical assistance to them.

As to 1942, our efforts will be concentrated on keeping pace with the national "all-out" defense program, by striving to fill our share of government orders and commitments from companies working on defense contracts, as well as endeavoring to solve the problems of the nondefense consumer through the development of new products. Moreover, one of our major tasks during 1942 will be the operation of a $16,000,000 magnesium plant for the Defense Plant Corporation. This plant, now being constructed at Lake Charles, La., will have an annual output of 30,000,000 pounds of magnesium metal.

B. F. Ascher

President, American Pharmaceutical Manufacturers' Association

The American Pharmaceutical Manufacturers' Association has completed a year in which the association has tried to give greater service to its members. This extra effort and endeavor have been occasioned by recognition of the fast-changing times. In the space of one year it is remarkable to look back to January, 1941, and consider our problems at that time and compare them with our problems in December, 1941.

It is impossible to predict the course of events in 1942. Undoubtedly shortages in chemicals and materials will occur. Synthetics and substitutes will be developed and adapted. Our natural ingenuity will be tasked and will not be found wanting.

Business during 1942 will undoubtedly set records with most of the members. Due to our great defense effort, our national income will set all-time records which will be reflected in our members' sales. We have the unusual job in 1942 of allocating our products fairly among our customers, not exclusively selling.

Yes, we are going to have lots of problems next year, but we have a duty in 1942 that compels our solving these problems. We must contribute our share to preserve our country. We are obligated to see that the pharmaceuticals necessary to our fighting force and our civilian population flow in the quantities required and up to proper standards. We further realize that through research we must provide medical advancements to increase the health and efficiency of our country's citizens.

William R. Boyd, Jr.

President, American Petroleum Institute

The declaration of the existence of a state of war with the Axis powers found the American petroleum industry working at breakneck speed, with the thoroughgoing cooperation of the government, to meet new demands for petroleum products, and to eliminate bottlenecks before they have a chance to affect the supply of petroleum.

On the very day Congress was acting to meet the treacherous attack of Japan, Petroleum Coordinator Harold L. Ickes, with keen foresight and patriotic resolve, was organizing a Petroleum Industry Council for National Defense—a sort of partnership arrangement between the Federal government and the petroleum industry, to have petroleum play its all-important part in prosecuting the war.

Demand for petroleum products in 1941 was by far the greatest in the eighty-year history of the industry, amounting nearly to 1,600,000,000 barrels,, or almost 10 percent above 1940; United States consumption alone increased more than 12 percent. At the end of the year the industry was producing crude petroleum at a rate of more than 4,100,000 barrels a day, with predictions made that rapidly mounting needs would require production of 4,500,000 barrels a day by the middle of 1942, and possibly of 5,000,000 barrels a day by July 1, 1943.

The petroleum industry, by its very nature, is so integrated from oilwell to consumer that almost any operating change in one small part of the industry has its inevitable reaction in other branches of the industry thousands of miles away. Defense demands already have made many such changes imperative, and more will come.

In order that these changes might be made with complete fairness to all elements of the industry, and that the industry might make its maximum cooperative contribution to national defense without any hindrance because of possible illegality, the President on May 28 appointed Secretary of the Interior Harold L. Ickes as Petroleum Coordinator for National Defense. With the cooperation of the industry and of dozens of regional committees of oil men, he has prudently and effectively met the problems that so far have appeared, and actively is working closely in cooperation with the industry to assure completely adequate supplies of petroleum for all national defense needs in the future.

On December 1, 1941 this government-industry cooperation was put on a more formal basis with the appointment of a national Petroleum Industry Council for National Defense, charged by the coordinator with advising him and considering on its own motion matters relating to the coordination of the industry, and taking any action recommended by the coordinator. The council is composed of representative oil men from all branches of the industry.

During 1941 the industry was concerned with a number of potentially serious problems, among them the threat of a deficiency of petroleum supplies on the East coast, huge additional demands for 100-octane super aviation motor fuel, reduced supplies of raw materials for the manufacture of tetraethyl-lead, and the need for high priorities to assure the continuing normal operations of the industry.

To meet these and other national defense emergencies, the petroleum industry spent hundreds of thousands of dollars in new capital expenditures during 1941, for new refining equipment, new pipelines, and new tankships, along with the regular capital expansion of the industry. Shipyards turned out many new high-speed tankships in record time during the year, and many others are being built or are on order for oil companies and the Maritime Commission, with completion scheduled for 1942 and 1943.

Two national defense pipelines—a 250-mile crude oil line from Portland, Me. to Montreal, Canada, and a 450-mile products line from Port St. Joe, Fla. to Chattanooga, Tenn.—were completed before the end of the year, and a third products line, 1,260 miles long, from Baton Rouge, La. to Greensboro, N. C., is nearing completion.

Capacity of American refineries to produce 100-octane aviation motor fuel increased to nearly 44,000 barrels daily (50,000 barrels or 2,100,000 gallons with a greater proportion of tetraethyl-lead) by the end of 1941, and plans sponsored by the Petroleum Coordinator call for quadrupling this huge capacity within the earliest possible time. The present capacity for this one grade of aviation fuel alone is far greater than the total capacity of the rest of the world combined, and is seven and one-half times the U. S. consumption of all grades of aviation fuel as recently as 1938.

All the agencies of the Federal government having to do with petroleum and petroleum product production and transportation are busily engaged in working out cooperatively with the industry every problem as it arises. The Office of Petroleum Coordinator for National Defense is functioning with great intelligence and effectiveness. The state regulatory agencies and the Interstate Oil Compact

Commission are geared into the program. And the petroleum industry and all its units are going to do a magnificent job.

H. L. Brooks

President, the Toilet Goods Association

During the past few years a greater appreciation and interest has developed in and for the toilet goods industry, not only because of the effect and results that the individual achieves from the proper use of its products, but because of the realization that good grooming and a better general appearance have a noticeable effect on the spirits and morale of all.

Even certain State institutions of one kind or another are teaching their inmates more and more about tidiness and an attractive being, so that when discharged they are better able to take their proper places again in society. Many women's colleges throughout the country have made good grooming, charm, and beauty courses part of their curriculum.

And so our industry, as it faces the New Year, believes it has a major and greater role to perform in the maintenance of public morale. It is a truism that man does not live by bread alone, and if this axiom covers the lovelier sex also, it is just as true in wartime. That appeal should not and will not be used as a direct means to sell our merchandise, but our industry does hope that its importance in the American standard of living will not be overlooked or go unrecognized when the needs for civilian use are allocated. At the same time, first things must come first, and as essential as may be our part in the public welfare, still more imperative and necessary is the role we must and will play in aiding our country with every means at our disposal to achieve the victory which must and will be ours.

Already our industry has voluntarily offered to reduce its consumption of paper and cardboard during the coming year by 25 percent from the quantity used in 1941. It is studying the possibilities of pressed cardboard, processed paper, and certain plastics not on the priority list, for lipsticks, compacts, and the like, to replace the metal now used, which material is more badly needed in the armament program than those mentioned. If a shortage of alcohol should develop because of its required use elsewhere, then we shall expect to have our allocation reduced in line with other civilian industries.

As for essential oils heretofore imported from abroad, and of which a shortage may develop in the future, research is being conducted with the Department of Agriculture, as well as with countries in Central and South America to try to produce in this hemisphere the equivalent quality of those heretofore brought in from Europa, Asia, and Africa. This industry has a heritage of quality to live up to, and it will continue to maintain that high standard even if it means a voluntary elimination of certain products because of the impossibility of getting the essentials that go into our blending. We unfortunately cannot be too confident of quick results in this field, as the establishment of a native industry in essential oils is a matter not of months, but of years. As for containers and presentations, the public may have to accept less fancy ones during the months and years to come, but after all, it will be the products themselves—the daily indispensables—that will be wanted as so well illustrated by the demand that exists for these daily necessities today in England after more than two years of war. Those we shall do our utmost to furnish to our consumers.

Our relations with our trade and public have been strengthened, mainly because we have offered quality merchandise at reasonable prices.

Despite obstacles and problems ahead, we face the future with every confidence. We pledge ourselves to fulfill our threefold responsibility to our country, our customers and our consumers.

G.F. Coope

President, Potash Company of America, New York

The year 1942 finds a young American enterprise faced with the task of supplying potash for domestic agricultural needs indicated as extremely heavy, a substantial demand for tonnage for chemical uses, and a call from our friendly neighbors, such as Canada and Cuba, to take care of their requirements.

At the beginning of World War I the American potash industry was practically nonexistent, and we were dependent upon Germany for supply. When this was cut off, all kinds of expedients to produce potash were resorted to, and prices climbed to fantastic heights for the small amount available. At the end of the war, the European producers came back into our markets and all American producers, save one, the American Potash & Chemical Company, were forced out by competition. During the 1930's, as a result of government exploration and subsequent private development, the deposits of the Carlsbad district in New Mexico were opened up and became producers. However, until the outbreak of the present war in Europe, a large part of the potash used here was supplied from abroad.

Today we find that conditions are quite different from those in the last war. Rapid increase in productive capacity, some of which is just getting into operation, plus twenty-four hours per day, seven days a week working schedules, have placed the American producers in a position to take care of the indicated demands with high quality products, both agricultural and chemical. Nor is there any reason to expect a repetition of the price performances of the first World War.

The result has been achieved by a combination of an aggressive and enterprising policy on the part of the industry in anticipating needs and spending the necessary money for additional plant to take care of them, and a cooperative and helpful attitude on the part of government in obtaining the necessary equipment for this work. Due to these factors, I believe that the American potash producers are ready to do their job.

Clinton H. Crane

President, Lead Industries Association

At the close of 1941 lead is still in the best supply position of any of the common and essential metals, just as it was at the beginning of the year. However, the situation is by no means as easy as it was twelve months ago. At that time it appeared that defense requirements would take only a small portion of total lead production and thus leave a large tonnage of lead for civilian uses. Actually defense took a much larger portion of the available lead than was anticipated and the normal civilian uses of lead expanded tremendously. On top of this acute shortages of such metals as copper and zinc led to wholesale substitution of lead for these scarcer metals. Instead of lead being easily able to satisfy all demands, many thousand tons more could be used each month.

Production of lead by domestic refiners has been running in the neighborhood of 50,000 tons a month. Another 25,000 tons a month is being provided by Mexican, Canadian, Peruvian, Australian, and other foreign mines through the government's Metals Reserve Company. Consumption has averaged about 80,000 tons a month, the difference being provided from stocks of foreign lead taken over by the Metals Reserve Company in the

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Summer and to some extent out of stocks held by domestic producers, which are now reduced to a low point. Consumption would be much higher if the lead were available.

Toward the year-end domestic mine production began to show an increase and should average appreciably higher in 1942. This resulted from mines changing from a five-day week to a six-day or seven-day week. An unofficial ceiling price of 5.85 cents per pound exists on lead at the request of OPA. A higher price would probably bring into production a large number of small, high-cost and marginal producers and additional foreign lead.

As the situation during 1941 gradually grew tighter, lead was placed under full government control in October by general preference order M-38 of the OPM. Under this order, domestic producers are required to set aside a percentage of production each month to take care of immediate defense demands.

Among the defense uses of lead which first come to mind is ammunition. The demand for this purpose increased greatly toward the end of the year upon completion of new government ammunition factories and will increase further as a result of actual declaration of war. Storage batteries, cable sheathing, chemical equipment for explosives plants, plumbing in defense housing, and a number of other uses come under the heading of defense. All these demands are being satisfied.

The demand for lead from the white lead industry has been heavy. That industry is working at close to capacity and could use a great deal more lead than it is getting. Shortages of zinc oxide and titanium pigments have added to the already heavily increased demand for white lead.

As conditions stand at present, there is little danger that defense needs will not be fully provided for, as will probably essential civilian requirements. The course of the price and resulting production may well determine what happens to many civilian requirments, which will also be affected by curtailment in many industries, like the automobile and building industries.

John N. Curlett

President, National Association of Insecticide and Disinfectant Manufacturers

The membership of the National Association of Insecticide and Disinfectant Manufacturers is faced with a great responsibility. "Disease has always been more deadly than bullets in its toll of human life." Therefore, with the concentration of new groups in various sections of the country at this time, the protection of the public health is a more serious problem than under normal conditions. The maintenance of sanitation and the control of disease are problems which rest heavily on the membership of our group.

To keep the channels open so that supplies of the many materials necessary for the products used to control insects and disease germs is our main problem. In addition to the normal demand there is going to be an extra demand brought about by the large movement of troops as well as of populations on trains to army defense plants or wherever there are any new groupings of people. Therefore, the membership of this association has an extremely busy year ahead of them in seeing that these materials are available when needed. Fortunately, the supply of these products depends upon the allocation of materials, most of which are in this country. This is so unlike my own particular business of spices, teas, and extracts, the raw materials for which come from countries that may not be able to export for sometime, due to the war.

The membership of this association definitely appreciates the problems which the officials in Washington are having in the allocation of raw materials and has heartily endorsed the defense program and will do everything in their power to cooperate with it. Then, in turn, they appreciate the fact that the health officials of the nation realize the responsibility of our membership to control that deadly enemy—"disease."

R.H. de Greeff

President, R. W. Greeff & Co., New York

In reviewing the position of the chemical industry during the year 1941, it is naturally tempting to make a comparison with the opening period of the last war, particularly to those of us who were active in the industry during that time.

Several factors stand out prominently in such a comparison. First of all we must be struck by the enormously increased output in all lines of the industry during the present time, and it seems hard to realize how we managed to get along with our 1914-1918 output of many products, particularly in view of the fact that quite a few of our products were then extensively shipped to the various allied and neutral countries.

Secondly, we must be impressed by the much more intelligent development of marketing and pricing adopted by the industry during our present emergency, due to the fine restraint shown by the important factors in the industry as regards distribution and pricing of their products, helped no doubt by the also more intelligent organization of purchases on the part of foreign and domestic governmental agencies.

The chemical industry stands close to the top of the list of those fields of endeavor which are in the front line of our war effort, and it is gratifying to see how our industry has risen to the demands made upon it.

Carl Z. Draves

Former President (1941), American Association of Textile Chemists and Colorists.

The technological position of the United States in 1941 with respect to textile dyeing and finishing stood in marked contrast to the situation in 1917. Most fast dyes and special textile chemicals were unavailable for the textile industry in World War I because they had been imported. Furthermore adequate and uniform methods for testing dyed and finished fabrics were also not available because of this general dependence upon Europe and because there was no organization in America interested in the promotion of testing methods adapted to American conditions of manufacture and consumption.

With the establishment and growth of a dyestuff and textile chemical industry in the United States after the last war, there was founded about the same time (1921) the American Association of Textile Chemists and Colorists with a membership drawn from chemists both in the textile mills and in that part of the chemical industry which serves the textile field. This association, through its research committee, set itself the task of studying methods for testing the fastness of dyed and finished fabrics to all destructive agencies, such as light and washing.

As a result of these research activities of the American Association of Textile Chemists and Colorists and the cooperation of other organizations, such as the American Society for Testing Materials, the American Standards Association, the National Bureau of Standards....and others, there are now available standard methods of testing which are widely used by army, navy and other purchasing agencies in specifications for the purchase of textile materials of all kinds. Since 1917, therefore, not only has the American chemical industry made dyes and chemicals of domestic manufacture available for textile finishing, but the government is enabled to insist that textile materials meet exacting but practical standards of quality.

This coperation of American textile chemists with the government for defense purposes is being actively followed in 1942. A committee of the association is now working with the Quartermaster's Department of the United States Army for the specification of wool dyes suitable to obtain an olive-drab color on woolen materials, which will not only exhibit the necessary fastness properties but which also will give uniform results in different textile mills so that all olive-drab uniforms will indeed be uniform.

Arthur G. Dunn

President, American Spice Trade Association

The year 1941 has certainly been an active and hectic year for the entire spice industry.

All the difficulties and problems which have confronted it cannot be written unless at great length, but briefly the highlights have been along the following lines:

All the association's standing and special committees have worked very diligently to co-operate in every possible way with the trade, the Food and Drug Administration, and other government agencies. The association has formulated a committee entitled "The Special Committee on Production of Spices, Seeds, and Herbs in the Western Hemisphere" whose purpose it is to encourage new sources of supply and the growing of domestic spices and allied products.

During this year, two special contracts have been adopted by the membership for use in connection with sales of ground bulk spices and seeds. The continued use of these contracts will be of great benefit to the spice industry.

The association is now working on another contract for the use of the grinder members, for their sales of ground spices in bulk, and it is anticipated that the association will hold a special meeting for the purpose of approving and adopting this contract early in 1942. We feel sure, inasmuch as this contract has the endorsement of the spice grinders' section, that its use will be found beneficial to them.

Despite the many difficulties that have arisen in our trade, the number of arbitrations have been comparatively few which in itself speaks for the splendid co-operation of all of our members.

Careful survey of the quantities of spices available at the time of this writing show ample supplies of the principle spices on hand for our ordinary needs for some time to come.

Fresh natural spices are a very important part of our food industry, and our campaign of many years to encourage the use of only fresh natural spices will continue.

John J. Emery

President, Emery Industries, Inc., Cincinnati

The stearic and red oil industry has been running at approximate capacity, and we anticipate a continuance of this situation due to the war uses of its products.

E.K. Halbach

President, General Dyestuff Corporation, New York

The year 1941, as far as volume of sales is concerned, has been one of the largest since the establishment of our dyestuff industry. Also, it has been one of the most exacting years for the industry, especially the latter half of the year. At the beginning of the year, the civilian business was exceptionally good, and then as the government work commenced to flow, we were all confronted with the change-over to colors suitable for defense. Especially in the vat color field, the demand has been enormous, but in spite of the strain the industry has been able to satisfy the demands made upon it. Naturally, the stocks of most all of the manufacturers must be depleted and those goods which have been in most demand are being shipped practically hot from the driers.

It stands to reason that an industry such as the dyestuff industry, which was planned and developed to take care of the normal requirements in this country, with a moderate allowance for export, would be subjected to a terrific strain when it is called upon to supply not only our own increased consumption—first for civilian and later for defense work—but also endeavors to co-operate in our goodwill policy with our Southern neighbors; to assist our allies especially with defense orders at the request of our government; and to co-operate under the lease-lend plans. The industry is trying to perform a man's sized job and it needs every bit of help and co-operation it can get.

As for 1942, the prospects are for declining civilian business and rapidly increasing defense business, which, together with the requirements made on the industry as explained above, means that the dyestuff and allied industries will have to make superhuman efforts in an endeavor to meet the demands made upon it. As an industry, I am sure we have the men and the ability, and that none will be found wanting in this time of stress and strain.

Albert W. Hawkes

President, Chamber of Commerce of the United States

Entering the doorway to the year 1942, every American should recognize that the threats to our American way of life—and, therefore, the responsibilities of each of us, are greater than have been heretofore known to any living American. No one can foresee the future and no one can predict, with certainty, the outcome of events.

We do know, however, that victory requires a united front—victory requires the best there is in each of us—and victory in a representative democracy requires that each should do his full share in the production, as well as in the use, of the machines and materials of war. All this must be done in the American way; namely, through voluntary cooperation. It may be necessary here and there to surrender temporarily some of our individual freedoms and rights. It may be necessary to accept temporarily a different type of regulation and restriction than belongs to a representative democracy in peacetime. If so, all good Americans will do it with good grace, but with a firm determination that the waiving of these rights and the acceptance of these unusual restrictions must be temporary and must never take on the form of permanent surrender. If these rights and privileges are permanently surrendered, then indeed will our fight to preserve the American way of life be in vain.

Our forefathers started the fabric of representative democracy in this country, calling it a Republic, and it has been woven over a period of more than 150 years, through hard work, self-denial, intelligent research and development in the interest of creating for all our people a higher standard of living than has ever been known.

The war now going on is a war in which brute force, barbarism, and dictatorship are trying to impose the will of the state upon the people, rather than to permit the people to furnish the voice and direction to the state—their servant. Those who will look, read, and understand are beginning to recognize that there is no substitute for hard work and sacrifice, either in creating or maintaining our standard of living. Unless our people as a whole learn that there is no easy way to obtain a good standard of living and that nothing but hard work and vigilance will protect individual freedom and the blessings that go with it, then indeed will the outlook for the future be dark. We must all have faith in the final good common sense of the people as a whole. We must be patient and considerate of one another and not unjustly critical.

Right at this moment time in the production of things needed to prosecute the war to victory is of the first essence of the achievement. Let us all stop being boastful and go to work, creating harmony and speeding up production. Results will acclaim themselves.

The outcome of this war will depend in large measure upon the development of superior organization and the production of materials required by men of courage and determination to accomplish victory. These men are doubly fortified when in their true consciousness they know their cause is right and in the interest of humanity as a whole.

We have a heartrending job to do, and we should all recognize that it entails work, sacrifice, suffering, and distress. The suffering and distress can be lightened if we cooperate fully and completely without the loss of a moment and with the determination of all to make it impossible for any one to take an unfair or unjust advantage of a national crisis for personal gain.

We should determine to do the best we have in us to complete successfully today's work today and carry

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this program through to the final day of victory. We must determine to make that victory a victory in fact, and this can be done only by following a course of tolerant understanding and charity in the making of a peace founded upon principles of justice. Only through peace so established can we expect it to be lasting and can we through the years to come look back upon our achievement with pride.

F. Albert Hayes

President, National Association of Purchasing Agents

War is here and we, as citizens, renew faith in our government, a government of, by, and for the people; reassert loyalty to those founding principles of freedom, justice, humanity, and equality for which our forefathers pledged their lives, their fortunes and sacred honor; and promise to defend the United States, so that freedom shall not perish from the earth.

We, as purchasing agents, serving our companies and our country, have seen and felt the increasing strains caused by preparation for the defense of our country. These will fade to insignificance compared to the stresses and dislocations now to ensue. "M" day has come. It is our job as citizens and purchasing agents to give ourselves unstintingly to the task before us. This we pledge.

This was to be a message carrying my best wishes for a Merry Christmas and Happy New Year—but I think I'll change it to a prayer that conditions will be changed in the not distant future when we can appropriately extend such greeting. So, in the meantime, carry on with stout hearts, undaunted courage, strong in the faith of better days to come.

Charles L. Huisking

President, Charles L. Huisking & Co., New York

While for those of us extensively engaged in import and export trade, the year just closed has been a particularly hectic one, a comparison with the conditions that prevailed in the first few years of the previous World War moves up more favorably for the present.

The outstanding feature of these days is the sound basis of our American chemical industry, and while the first consideration has been to the supplying of domestic needs, enormous quantities of American-produced materials have gone to the open ports of the world with very little upset to our home markets, and it has been a blessing to the legitimate trade in foreign countries that these supplies have been so readily available.

With our actual entry into this war, there has been a natural tendency to tighten up on supplies and on December 23 there came into effect the licensing of all export shipments, but with a recognition on the part of Washington that legitimate buyers outside the U.S.A. should have their supplies furnished from here if that imposes no penalty on our domestic needs.

While war always creates chaos, the organizing of supplies, shipping space, etc., is steadily being improved, and this is always made more successful when trade support is readily given, as is the case now.

There is far less tendency to speculative buying than was the case in the previous war, but the main reason for its absence has been the determination of the manufacturers themselves to keep their products flowing through established, legitimate sources, and while it cannot be controlled completely, this policy, plus the adoption of price ceilings, the shutting off of outlets, etc., has minimized it.

The outlook for 1942 is obscure with a unified determination to make the winning of the war paramount, and while we are sure to have many more restrictions placed upon us than have prevailed up to now, and some of these are likely to be burdensome, the hope and need for a quick victory over our enemies will ease the burden of complying with them.

With the Pacific area having been brought into the war the incentive for producing synthetically some of the important items coming from there is accelerated, and as extensive work has already been done it is hoped that since the cost angle can now be taken care of that more of these will be firmly established and being produced competitively when the war ends.

Fortunately, for this country camphor is now being produced in sufficient quantities to take care of the country's normal needs and this has been one of the outstanding developments of recent years. This has enabled our consumers to cover their requirements on a normal price basis, and as much progress has already been made on menthol, it is hoped that the existing difficulties on this will also soon be overcome.

Lee Wilson Hutchins

President, National Wholesale Druggists' Association

For a vast majority of the members of the National Wholesale Druggists' Association, the end of the calendar year is also the end of the fiscal year, and therefore within the next few days or weeks the net results, financially speaking, of 1941 operations will be a matter of record. Undoubtedly most of our members have enjoyed the largest volume in the history of their respective institutions. At the same time, the costs of operation, particularly as related to taxes and labor, have increased even faster than volume, so that I do not look to see the net result, by percentage, very much greater than for 1940.

Of course, at the same time, we recognize that the end of these increasing costs is not with us, so we shall have to work even more strenuously in 1942 than ever before to preserve the net profit for our stockholders, and, in fact, to preserve the very existence of our businesses.

I am happy to report that prices in the wholesale drug industry have not advanced very greatly, and, in fact, the drug business as a whole has lagged behind many other lines in the matter of price increase. Therefore, our volume is not a fictitious one, but it has represented lots of hard work out on our territories, and in the handling of orders in the house. Our retail druggist friends appear to have enjoyed the largest volume of holiday trade in history, and that has brought about a somewhat better collection situation than we might otherwise have anticipated.

Naturally, the wholesale druggist is most concerned about the ever-increasing list of shorts which he must present to his retail druggist customers. There is every evidence that this list will greatly increase in the immediate future, and that we shall be hard put to it to maintain a fair volume, and a modest profit. I think I can truthfully say that every service wholesale druggist, in the process of putting his house in order, will take immediate steps to control inventory and receivables, so that he may maintain a proper degree of liquidity at all times, and be prepared to serve his retail druggist friends, and in turn his employees and stockholders, in the most constructive way possible.

It is only by keeping thoroughly abreast of changing conditions that our membership may hope to survive successfully in times which are immediately ahead of us. At the same time, we cannot, as a trade group, change world conditions, and we must meet them and be prepared to do our part to win this war in which we are engaged, which is the major responsibility of every one of us, whether individual or corporation.

Adrian D. Joyce

President, The Glidden Company, Cleveland, Ohio

I am pleased to tell you that the paint and varnish industry is meeting the situation splendidly. In our company it has been necessary for the laboratories in our various plants to keep busy developing new materials to take the place of materials which are essential for the war emergency, and for our formulators to be on the alert to constantly develop new formulas to meet the new conditions. Everyone is carrying on in good shape, and our industry will undoubtedly be able to go through the emergency without difficulty.

The prospects for 1942 indicate that there will be a very large demand for paints and industrial finishes to sup-

ply defense and war needs. The volume of business should be even larger than the big year of 1941.

Edward V. Killeen

Associate, George Lueders & Co., New York

This 1941 has been a busy year for my company. We were fortunate in that we lost but three shipments from the many which were made to us from overseas. One particular lot of merchandise was eleven months enroute from Europe and another slightly more than one year.

I wish I might dare to prophesy peace for 1942, but I cannot. Rather on the contrary I feel, like many others, that we shall have to pass through dark days, very dark, before the dawn of peace. Naturally we shall have increasing complications to contend with, due to the shortage of tonnage, to the hazards of sailing, and to the restrictions due to priorities.

Let us all join in a prayer that loss of life will be minimized, and let us all hope that our country will emerge from the present conflict gloriously, and greater than ever before.

W.S. Landis

Vice-President, American Cyanamid Company, New York

Men of science in general accept the theory of evolution and believe that man through a long and slow process of selection and differentiation has developed some degree of intelligence. Too much emphasis is frequently placed upon the intellect and too little upon the unchanged brute traits that have passed unchanged down the line. War as a means of settling disputes is one of these latter. Its origin today is the same as that controlling the brute instincts of the primitive human when as a member of a pack he roamed the forests and grasslands. It is the selfish desire for power, for easy wealth, for vengeance. With such a background naturally it cannot solve rightly any political problem. As someone once well said, "It is a racket."

No intelligent man can find any useful purpose served by war, least of all the industrialist. To him it means interruption to the orderly conduct of his business, to production, to customer service, to research, to the well-being of his employees. Over the long cycle it produces no advantage in any of these fields of his activity. It spells only loss—loss of staff, loss of skill, loss of application of orderly management, loss of wealth to his country, his employees, his stockholders. Business is soundly and universally opposed to war. Nevertheless we now find ourselves in the midst of an international conflict. Possibly such could not have been avoided. We must face the fact and let the historians do the arguing. We are going to suffer all of the evils mentioned above, and many more which readily might be added.

The year 1942 now before us opens with this distressing picture. It is up to us in industry to exert every effort to ameliorate these bad effects, for we cannot avoid them. It is our duty to employ our plants, our tools, our manpower, and our ability, first to the service of supply of defensive and offensive weapons, and if there is anything remaining, to meeting civilian needs, particularly insofar as they tend to raise the standard of living. We must keep this standard directed upward always in the hopes that at each succeeding stage attained we are displacing more of that animal trait that brings war into being.

Manufacturing chemical industry is essentially a service industry. It serves all and everybody. There is hardly an object with which we come into contact in the course of the day that does not, to a greater or lesser degree, depend upon our contribution. In times of stress such as this when superhuman efforts are employed in production of essential weapons of defense our service is of multiplied importance.

As a fundamental service industry, and sometimes far distant from the point of ultimate consumption, we have directed our entire attention to the task of improving our normal peacetime environment. We have done a magnificent work, and there is ample attestation. Sometimes I think our performance has been too good, and we may be charged with some slight responsibility for the present situation, for we and our allies did destroy a great monopoly some two decades ago. Only the political demagogue can charge us with unpreparedness for this emergency. We were never consulted in any planning. Our skilled commercial and technologic personnel were called only at a very late date. Industry was never at fault.

The task before us is not going to be solved by rubbing a lamp—by an Aladdin. It will be solved only by the hardest kind of work, the most exacting and careful planning, the exercise of the cleverest executive ability. Politics must be furloughed, and the industry invited to nominate its best talent to solving the immediate emergency of supply.

What is ahead of us in 1942 can be said in two words:—"Hard work!" We must scheme and manipulate and squeeze for every last ounce of production. Where materials are short we must get better efficiencies. Where equipment is inadequate we must get more performance. Where maintenance is a problem we must strengthen our inspection, drive our shops, and speed up our millwrights. Our laboratories will probably have to suffer the shelving of many of their pet projects, and be reassigned to many of the processes that have long since left their shop for the operating unit, to do what they can do to improve and increase production. They will become efficiency experts in both utilization of materials and servicing of processes. We just must do a better job.

Our sales forces and service men must aid in the solution of the many new problems of their customers incident to substitution, to stretching of available resources, to improving the performance of their customers' plants. We cannot be satisfied with winning the war and moving backward from our position of future peacetime usefulness.

To the executive comes a particularly serious problem, that of the postwar program. He must anticipate the probable duration of the conflict. He must understand the economic standards that will prevail when peace again comes. He must preserve his institution to continue its service to the public and to maintain the morale of its staff. This may be a larger problem than the immediate one of production for it has many intangibles and not too secure foundation from which to base the start. The science of government and of economics and of management is much less highly developed than our chemical science with which we are dealing constantly. This makes the problem of the executive much more difficult than that of the technician.

It is not necessary to emphasize the probable shortage ahead of many raw materials. More serious than this, however, is the shortage of competent manpower. While the manufacturing chemical industry, measured by its peacetime program, has grown, such expansion is relatively slow. The enormous scale on which these munition plants have been projected, some portion already in operation, is calling for chemically trained personnel much faster than it can be supplied. Many of these new plants are engaged in complex production of a particularly hazardous nature. They demand exceptional competency on the part of the supervisory and management staffs. Chemical reactions can readily go astray into destructive channels. Just where all the experienced service is going to come from to maintain productive capacity in these munition plants I cannot foresee. We in the industry must enforce upon the recruiting offices the fact that it takes six to ten years to make a competent chemist and we cannot afford to lose them into occupations that can be filled by less highly trained individuals. I believe competent personnel is the biggest problem ahead of the chemical industry.

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Harley Langdale

President, American Turpentine Farmers Association Cooperative

During 1941 the American Turpentine Farmers Association Cooperative saw one of its aims accomplished—the restoration of the price of gum turpentine to more nearly its true value. When our national advertising campaign began gum turpentine sold as low as 12 cents per gallon. The closing price for 1940 was 32 cents per gallon, and today is quoted at 68½ cents. The top price obtained during this year was 75½ cents per gallon—the highest price since the depression. This was accomplished through cooperation.

Gum rosin has also been consumed in larger quantities during 1941, causing a price increase. When the year 1941 opened a drum of "Kate" gum rosin was worth $10.92; today that same drum will bring $16.07, or an increase of $5.15. Since some of our imports have been cut off gum rosin is being used as a substitute for other commodities and I believe the future for gum rosin is very bright. No one could have thought gum naval stores could make the progress it has this year. The outlook for 1941 last January was very dark. It was true at that time gum turpentine had the best statistical position in several years, but gum rosin stocks were probably the largest ever known when the year began. January 1, 1941, the Commodity Credit Corporation held 1,380,683 packages of gum rosin and 95,160 casks (50 gallons) of gum turpentine. Today the gum turpentine stock has been wiped out and the large surplus of rosin has been reduced to 852,182 packages—a reduction of about 40 percent. We no longer have a surplus, but are approaching a normal carry-over.

In July of 1941 when it was seen rosin was moving into a better statistical position the American Turpentine Farmers Association obtained an increase of ½ cent per pound on the Commodity Credit Corporation loan price for gum rosin. Our association has obtained a loan program for 1942 which assures its members the highest return for their product in over ten years. In my opinion, the price for gum rosin in 1942 will range well above the loan prices the same as the price for gum turpentine has done in 1941.

In order to prevent a gum naval stores famine the Department of Agriculture in the latter part of this year asked that our producers make plans to increase their crop by 33 1/3 percent in 1942. While I am sure there will be an increase, it is not probable the crop will be increased by such a large amount, because labor to work the turpentine farms is not plentiful and the gum naval stores farmer has to give consideration to costs.

In 1942 our association will continue to work for improvement in the gum naval stores industry so that its achievements will be enjoyed and further progress will be made through cooperation.

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David H. Litter

President, D. H. Litter Company, New York

Even though we didn't formally enter the war until December 7, 1941, nevertheless we were on a partial wartime basis, similar to the period preceding our entry into World War I, and despite mistakes we were much better organized in 1941 than we were in any of the years, 1914 to 1917.

In World War I we had no chemical or coaltar industry to speak of, which caused much confusion, hysteria, frantic expansion of plants, and pyramiding of prices; then came the postwar depression, which was all so fresh in our minds that business generally was very hesitant about expanding to meet our present war needs, and the protective coatings industry was no exception.

In looking back over the history of 1941, I think our industry can be justly proud. Plant expansion hasn't been abnormal; prices have remained fairly stable; and because of our excellent trade association we have been able to correct, as well as anticipate, evils which, without a concerted movement, would have been impossible.

Shortage of some materials has had a very good effect on the paint, varnish, and lacquer manufacturers; it has prepared them for this all-out war program that we are now entering, and which from my attendance at the OPM meetings makes me believe that civilian production will be greatly reduced; this too will be accepted with good grace by our industry.

The more intelligent in our industry, immediately took up the challenge and began modifying their programs, making the necessary changes in the way of substitute formulations, and that particular work is now being accelerated by our actual entry into the war. It will have a very wholesome and healthy effect on our industry, and should when this war is over, stand us in good stead.

As for 1942, I believe that those concerns producing only for trade sales will have rather rough going. If they are not alert in making changes in their business to take on some of the defense business, they are going to find themselves short of raw materials.

I can foresee where civilian needs will be furnished by a different type of paint, varnish, and lacquer; the dry time will be longer; durability will be less; number of colors will be reduced; hiding power may be reduced; and those who follow the trend and prepare will survive; these in my opinion will be more successful than others; and those that don't will be lost in the shuffle.

I think the industry is fortunate indeed in having high-type men at the head of the various raw material organizations, who have very clearly and equitably taken care of their customers, and who, I know, will continue to follow that policy. In addition, they will, as always, continually spend money for development and research for better use of the more available raw materials.

While I can see unpleasant and turbulent times ahead, nevertheless, I don't believe that conditions will be too bad; and that most people will be able to continue in business not only for 1942 but for the duration of the war.

George A. Martin

Chairman, The Sherwin-Williams Company, Cleveland

Considering the chaotic condition of the entire world, it would be very unwise for me to attempt any predictions for our industry or any other. The best formula seems to be to take each day as it comes and do our utmost for all-out defense. If there is anything left, all right; but what we give and do for our country and for the cause of freedom is a privilege and is the least we can do to back up our gallant boys in the service.

In my opinion our industry is perhaps more fortunate than many in that we see no complete or drastic dislocation at this time. Confronted with the cold fact that we are at war and in a fight to the final victory, our industry, like others, should leave nothing undone to speed up the defense and build a powerful offense. To this one united purpose we all pledge ourselves heart and soul.

George W. Merck

President, Merck & Co., Rahway, N. J.

The year 1941 will remain outstanding with me in many ways but particularly because of the magnificent cooperation of both suppliers and customers throughout the chemical industry. The wholehearted and unselfish devotion of the industry's leaders to government and trade problems is an inspiring example of America at work and constitutes a real contribution towards defense.

There were many trying and difficult problems to be faced in 1941. In face of these difficulties it seems to me that we all should be especially proud of the fact that chemical prices stayed at almost normal levels.

We did our best for the government and trade in 1941, and we pledge our best for 1942.

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August Merz

President, Synthetic Organic Chemical Manufacturers Association

In 1941 there was a progressive increase of production in the variety and volume of all sorts of synthetic organics. Towards the end of the year the intermediate distribution began to be affected by the diversion of so much of the fundamental synthetics to war purposes that this in turn of course began to curtail the production of end-products not directly involved in army and navy needs.

For instance, phenol, methanol, ethanol, and anilin and intermediates derived therefrom required for the army and navy will leave relatively small amounts for civilian uses. In the dyestuff field colors will have to be restricted in variety, as will perfumery materials and the many miscellaneous synthetics used for other purposes—plastics, and so on.

Despite the increased production of basic synthetic materials and fundamental intermediates, the limitation of their use for civilian purposes will result in the standardization of end-products. In consequence there will be a much larger production of fewer synthetic products in all fields. However that of the synthetic fibers might well increase in variety in view of their adaptability to replace wool and silk which will be diverted mostly to war purposes.

The outlook for synthetic organic chemicals in 1942 is entirely speculative as regards a vast number of products not directly and immediately tied in with either war needs or essential items of public welfare. The basic commodities for their manufacture are mostly under allocations now. Production in the aggregate will exceed that of 1941 most certainly, but the details of that production will present a picture bearing little resemblance to that of 1941.

John A. Miller

President, National Fertilizer Association.

The year 1941 saw the largest consumption of fertilizers and fertilizer materials in history. The most careful estimate indicates a total consumption in continental United States of approximately 9,000,000 tons, of which 8,200,000 tons represented commercial sales and over 750,000 tons were distributed by governmental agencies. The previous maximum consumption was in 1930 when 8,222,000 tons were used, all of which were commercial sales. In 1937, commercial sales began gradually to increase after the depression and reached a total of 8,195,500 tons. The government in 1937 distributed 46,600 tons, making a grand total of 8,242,000 tons. In 1940 the governmental distribution had increased to 471,000 tons and with commercial sales of 7,839,000 tons a total of 8,310,000 tons was reached.

Consumption of plantfood in the year 1941, however, recorded a much greater increase than the tonnage figures would indicate. The average plantfood content of complete mixed fertilizers in 1930 was 17.8 percent; whereas, the average plantfood content in 1941 is estimated to be at least 19.5 percent; an increase of approximately 10 percent.

The plantfood content of fertilizer materials has likewise increased to some extent. In many areas 20 percent superphosphate is now the principal grade sold; whereas, several years ago the 16 percent grade was more predominant. There has also been a considerable increase in the manufacture of concentrated superphosphate containing from 45 percent to 48 percent available phosphoric acid. Higher-analysis nitrogen-bearing materials, such as urea and ammonia solutions, have come on the market and the use of other forms of chemical nitrogen has increased.

The use of higher-analysis fertilizers is of economic advantage to the consumer and manufacturer. The expense of labor, transportation, and bags for a ton of fertilizer containing from 20 percent to 24 percent plantfood is approximately the same as for grades containing a smaller percentage. There has been a demand from the farmer for lower-grade fertilizers on account of the price per ton, but this demand is fortunately diminishing, and the producers themselves prefer to sell higher analyses because they know that the purchaser of fertilizer will thereby get a higher plantfood value per dollar invested in fertilizer. Education of the farmer-consumer to buy only higher-analysis fertilizers seems the only logical way to insure that the most economical procedure is followed in this time of emergency. Our industry has been advocating higher analysis for many years and considerable success has been attained in this direction during the period from 1930 to 1941. If all State and governmental agricultural agencies will undertake an intensive educational program along these lines, urging the farmers to buy only higher-grade fertilizers, it will be found that the manufacturers of fertilizers will be most eager to cooperate in this educational process. It should be borne in mind, however, that there are a number of low-grade materials, principally organic sources of nitrogen, that it is economical and beneficial to use in many medium-grade fertilizers. On the other hand, there is no place in the industry for inert fillers, and the use of analyses in which such fillers are required should be eliminated.

Before the declaration of war December 8, it appeared that there would be a sufficiency of fertilizer raw materials available to furnish approximately the same amount of fertilizer for the crops of 1942 as was used in 1941. The announced program of the Secretary of Agriculture for greatly increased production of the protective foods, such as eggs, dairy products, and vegetable products, indicated that there would probably be an increased demand for fertilizers in 1942. It seemed doubtful whether or not there would be available sufficient raw materials to satisfy a demand for 1942 in excess of that of 1941. Nitrogen, one of the primary plantfoods, is also the basis of practically all modern explosives such as smokeless powder, TNT, and ammonium nitrate. The greatly intensified need for explosives may affect to some extent the supply of nitrogen obtainable for agriculture. Scarcity of ships may prevent the importation of sufficient nitrate of soda from Chile to meet our requirements, but a considerable proportion of the nitrogen needed for our 1942 crops is already in hand. It will not be possible in all cases for the consumer to get exactly the form of nitrogen to which he has been accustomed, but an agronomically satisfactory substiute will probably be available.

Sulphuric acid is used in large quantities in the manufacture of both explosives and superphosphate, and at the present time the supply of sulphuric acid seems scarcely adequate to meet all requirements. It is a fact, however, that a large proportion of the superphosphate needed for the 1942 crop-planting season has already been manufactured, and there is every reason to believe that there will be a sufficient supply of potash from the four large plants now in operation in this country. The potash scarcity in the first World War will be well remembered, and we are fortunate that this elemental plantfood is now in abundant supply in this country.

The need of burlap to be used as sandbags for defense purposes will cause some difficulty in plant operations. It is entirely possible that defense agencies may be able to provide bags of other fabric or paper bags sufficient to allow the fertilizer industry to move a normal tonnage.

The fertilizer industry well understands its position and duty in the prosecution of the war. The additional food supplies needed are in the form of crops under which fertilizer is normally used and these crops respond most readily to fertilization. It is, therefore, apparent that there will be no surplus supply of plantfood available. The fertilizer industry has been and will continue to put forth every effort toward maximum production.

The food production goals requested by the Secretary of Agriculture can not be attained without the intelligent use of every pound of plantfood that is available, and the employment of every sound agricultural practice in-

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W.J. Murray, Jr.

President, McKesson & Robbins, Inc., New York

The wholesale drug industry enters 1942 geared to play a constructive role in the development of civilian defense activities which are being intensified in every local community throughout the country as the result of America's entrance into the war.

At strategically located points wholesale druggists have supplies of needed first-aid equipment, drugs, chemicals, botanicals, and pharmaceuticals, ready to fill the needs of local pharmacists who may be appointed to act as emergency aid stations under plans projected by civilian defense authorities.

The sixty-five wholesale houses of McKesson & Robbins, Inc., stand ready to bend their every effort in this "service of supply" to the end that every community druggist within radius of their operations may benefit by the facilities for stocking and delivering essential supplies as occasion demands.

Fortunately it can be said, not only for McKesson, but for the industry as a whole, that we have come through the gathering uncertainties of the past year to find ourselves in an exceptionally strong position to deal with war problems thrust upon us with such startling suddenness.

Having experienced a successful year as reflected in United States Department of Commerce figures for the first ten months showing that wholesale drug sales were up 16 percent over the corresponding period of 1940, the industry has been able to readjust its operations and consolidate its position to meet the impact of the war and all that it implies.

The chief problem facing us as the new year opens will unquestionably be the increasing difficulty of obtaining adequate stocks of certain types of drug store merchandise. Uncertainty as to the supply of some raw materials, or their actual shortage, is diminishing the flow of merchandise from many of the 8,000 suppliers serving the industry, and wholesalers are actively engaged in trying to find additional manufacturing outlets to meet the retail demand.

Insofar as this effort is successful it should open opportunities for many small manufacturers who may have, or can acquire, facilities for the production of a varied line of sundry articles capable of sales through retail drug stores. As the result of shortage in materials, wholesale sales next year may be somewhat reduced over the record totals of the year just passed but no definite opinion can be hazarded as yet.

One of the encouraging factors in the situation, however, is the improved competitive position of the independent drug stores which account for three-quarters of the country's retail drug business. Latest government figures show that the independents, which are the principal customers of the wholesalers, are not only holding their own compared to the chains, but have bettered their sales position slightly during the year. This should tend to stabilize the drug trade to meet the eventualiies of the future.

The general rise in business activity was reflected in government figures showing an upward trend in wholesale drug inventories; but while this is not in itself cause for immediate concern, since larger stocks are justified under such conditions, common prudence dictates the necessity of giving very close attention to inventory control.

With dollar sales volume rising sharply, management must not be lulled into a false sense of optimism by comparing sales totals with previous years. Although the current high level of sales may be gratifying in itself, it is obvious that both the wholesaler and the retailer must do proportionately larger volumes of business to hold his own.

So far as the consumer is concerned the average drug store purchaser in 1942 will find less variety of specialty merchandise to choose from, due to an estimated reduction of 15 to 20 percent in the number of lines of merchandise carried. Drug stores will take on a more Spartan appearance as regards packaging of products and their display. Sales of drug sundries, such as rubber goods, surgical supplies, metal goods, and appliances of various kinds, will feel the effect of material shortages. On the other hand, an increased volume in the proprietaries, toiletries, and some miscellaneous departments may be looked for.

Among other problems facing the drug trade in which the wholesaler is much concerned, is the indicated shortage of trained pharmacists to man the prescriptions departments of local drug stores. The number of registered pharmacists graduated from the country's fifty-eight accredited schools of pharmacy is falling short of the yearly demand. The armed forces may be expected to take a constantly increasing toll of trained men in this field, while a larger proportion are being absorbed by private industry.

Happily the industry is aware of the necessity of stimulating greater interest in the profession and is assisting pharmacy educators in setting up a national foundation for pharmacy scholarships, which will begin to function in 1942.

S. B. Penick

President, S. B. Penick & Co., New York

Up to the present time the very serious problem of meeting both the normal and war demands for supplies has been satisfactorily met.

War conditions have brought to our industry, as to many others, not only the difficulty of taking care of usual civilian requirements, but the work has been multiplied and complicated through unprecedented needs in some of our lines.

Our industry has been able to meet most of these by virtue of wide experience and resourcefulness, and it is a satisfaction to state that the contribution to defense that this industry has rendered has been in the form of a wholehearted response by members of the group to any opportunity that has been afforded for service.

Supplies of botanicals and related products, while having some rather bad gaps, on the whole are sufficient for current and anticipated demands.

New sources of supply in some instances have already been developed and others are likely to be available during 1942.

Certainly nothing is being left undone by our industry to serve our country; and, speaking for ourselves, we are looking forward to greater opportunities for service in the coming year.

As for the business outlook, it is plain that sacrifices will have to be made that will cut deeply into normal conditions. Certainly we are all

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prepared for whatever demands will be made upon us, but until the horror of war has passed the business outlook must be very clouded indeed.

S. B. Penick, jr.

Chairman, Drug, Chemical and Allied Trades Section, New York Board of Trade

The Drug, Chemical and Allied Trades Section of the New York Board of Trade is a unique group within the industry in that its membership is composed of all branches of the drug, chemical, and allied fields. Thus, a forum of expression is offered to the industry on the widest possible basis.

No association and no business can look forward to the next twelve months with equanimity. The struggle on which our nation has embarked overshadows the individual concerns of private companies and trade associations alike.

It is almost a commonplace to say that, aside from actual armaments themselves, the war effort of the country depends on no industries to a greater extent than on the drug and chemicals fields.

In the more than two years since the war began, both industries have been affected by many changes and problems difficult to solve. The record of achievement, however, ranks high, and it is safe to say that the industry has cause for pride in its accomplishments to date.

The prospects for 1942 are that our problems will multiply. The challenge to the resourcefulness of our leadership and the initiative of our research workers will be tremendous. The only way by which we can judge the future is by the past and if the drug and chemical industry can hold to its past record of success the problems of 1942 will be largely surmounted.

Certainly those which are not overcome will be due neither to lack of effort nor to failure to make maximum use of available facilities.

John G. Searle

President, American Drug Manufacturers Association

The search for better medicaments and improved standards for existing ones was continued at a high rate by ethical pharmaceutical manufacturers during the year 1941. The latter part of the year found many of them researching for substitutes for items that had been curtailed because of war activities.

The increased employment, advanced wages, and a desire of distributors to increase inventories has resulted in an accelerated demand and as a consequence a good year for most firms, from the standpoint of sales. A proportionate increase in profits is not evidenced because of the added government demands for taxes.

For 1942 predictions must be tempered to consider war successes. There is every reason to believe, though, that the demand for pharmaceutical products will increase. Even though our armed forces might be built to include ten million men, there will still be a civilian population in excess of one-hundred and twenty millions which must be kept well so that production to back up the armed forces can be accomplished. In a nation with our resources and big production capacity, our health must be kept at a high level so that our full facilities can be utilized. We apparently must also be world headquarters for many important health supplies to help our allies and at the same time carry out the Good Neighbor policy with Latin America.

These problems are realized by those in governmental authority and as a consequence, granting materials will be available, it would seem the pharmaceutical industry faces a busy year, in addition to having the opportunity to perform a very helpful and essential part in the war program.

W. H. Sheffield

President, Innis, Speiden & Co., New York

The last twelve months have been momentous ones from many a standpoint, and the chemical industry has contributed its full share toward making them useful and productive ones. The defense program took the spotlight early in the year and with the beginning of lend-lease arrangements in May, all industry, including chemicals, redoubled its efforts to increase production of practically every type of commodity entering directly or indirectly into what was then called "defense" use.

Labor troubles took their toll through most of the year, and the strike at Trona, Calif., at the plant of one of the largest chemical manufacturers, set a record for long duration and caused a few shortages in some of the products normally supplied from that poitn.

The efforts of OPM to stimulate additional production of vitally needed chemicals and to rearrange the distribution of many items have brought results, but not until late in the year was this influence felt by many in the industry. Likewise, OPA has endeavored to retard inflationary practices through the medium of price ceilings on many basic commodities.

The attack on Pearl Harbor of December 7 brought the whole nation together with a shock which could not have been accomplished by any program worked out in Washington. Now, as a nation at war, the defense program no longer exists. We are all cooperating 100 percent to make the victory program produce results.

For 1942, I can see only a long, hard, uphill pull with entire emphasis on the war effort. We must win, whether it be a short war, which to me seems highly improbable, or a struggle lasting for years to come. We can live only in the present and do our best while we are here. There will be many serious dislocations in industry which will quickly affect our way of living. Already the curtailment in sales of automobile tires, as well as new cars and trucks, has given us some insight into the future. Taxes will, of course, continue to climb as our planned expenditures for the war increase, and earnings will be less than last year.

However, I feel that each day, week, and month, we will become stronger through the united action of all of our people in backing up the military effort of our country and that of our allies in the great struggle in which we are involved.

I can see only victory ahead.

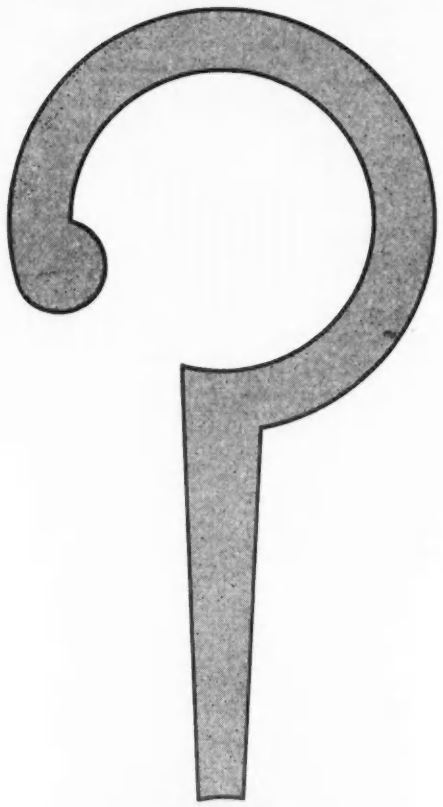
Herbert Spencer

President, The Asphalt Institute

Asphalt, although a component part of crude petroleum, has a field of usefulness totally different from other petroleum products, especially those used for combustion and lubricating purposes. Asphalt is primarily a material of construction, whether for roofing, or highways, or waterproofing, or for its many other uses. It therefore follows that the markets for asphalt are widely separated from the markets for the more combustible products like gasoline, lubricating oils, and naphthas. While it is true that the supply of asphalt is dependent upon the crude oil available and is subject to refining operations similar to other petroleum products, these are the principal points of similarity.

The greater part of 1941 was marked by a severe disruption in the shipment of asphalt due to the diversion of a large number of United States tankers used for transporting base material from South American countries to refineries along the Atlantic seaboard. It was necessary in many cases to resort to a rearrangement of supplies from other sections to take care of the falling down in water transportation.

The tremendous activity of the United States government in the construction of both army and navy airports and bases, the work of the Civil Aeronautics Authority, the cantonments, as well as the normal road program of the State highway departments, coupled with an increased demand for roofing materials, has been responsible for a decided increase in



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asphalt consumption. The Bureau of Mines figures indicate an increase in 1941 of some 21 percent over 1940.

As for 1942. Asphalt is in part a defense material and its use will consequently be governed to some extent by requirements for defense needs, as well as for highway maintenance and construction. If transportation facilities are available, indications are that 1942 will exceed 1941 in consumption.

The industry is being called upon more and more to develop asphalt for special uses, and this in turn requires considerable research for products used for many purposes. Insulating compounds, waterproofing materials, antierosion materials, roofing grades, and asphalt block are only a few of the industrial uses for asphalt on which research is being followed.

Ernest T. Trigg

President, National Paint, Varnish and Lacquer Association

The National Paint, Varnish and Lacquer Association is justly proud of the fact that immediately upon the declaration of the national emergency, it offered the services and facilities of its members to the government, without stint. Ever since that time and throughout the year 1941, the industry has consistently and enthusiastically given priority to the paint, varnish, and lacquer requirements of the government for the defense program, which, through the declaration of war made upon us by Japan, Germany, Italy, and our prompt acceptance of the challenges of those countries, early in the closing month of 1941, has now become the all-out victory program.

We realized from the beginning of the national emergency conditions that the conduct of business could not continue to be normal—that it would become more and more abnormal and difficult as the crisis deepened with each succeeding month.

One after another, standard paint, varnish, and lacquer materials upon which our industry had come to depend as routine practice have passed under Government control and their supply and use have become subject to highly complex priorities, allocations and price controls—a record which has been reflected from week to week in the columns of OIL, PAINT AND DRUG REPORTER.

Zinc oxide was one of the first of the major commodities used in the paint industry to go under government control, then lead, and more recently tung oil, natural resins, glycerin, and a long and impressive list of other important paint materials. The rapidly deepening problem in regard to these raw materials has been dealt with by the National Paint, Varnish and Lacquer Association in successive timely digests which have been mailed to members and published in the trade press, as one of the national association's services to its members.

Ever since the inception of government controls, the National Paint, Varnish and Lacquer Association has kept in mesh with the ever-widening and very complex organizations for government controls in Washington, in order to effectively see that the membership is in prompt touch with developments affecting the conduct of their business. Mr. George H. Priest, jr., of the association headquarters staff in Washington was designated as priorities consultant. The character of his service was reflected in his address on the subject of paint priorities at the 1941 annual convention of the association, held in Chicago, which included a roundtable discussion which has been published for distribution by the association. In accordance with a resolution unanimously passed at the convention, a paint priorities clinic, sponsored by the national association, was held in the auditorium of the Chamber of Commerce of the United States, December 2 and 3, 1941, for the discussion of priorities in the paint, varnish and lacquer industry as existent at that time. The session lasted for two days, and 179 representative members of the paint, varnish, and lacquer industry registered their attendance. The discussions at this conference have also been published for distribution by the national association.

Despite the exigencies of first the defense and now the victory program, the national association has never lost its grip upon normal fundamentals of the industry's business which must be kept thoroughly alive, nourished and functioning, although necessarily subordinated, whenever necessary, to the wartime requirements of the government. For example, the credit conference held in Chicago on Tuesday, October 28, was designed as a balance wheel in a year when every effort must be made to keep business from becoming unnecessarily unbalanced, and perhaps mean the difference between a prosperous solvency or disastrous ruin.

Scientific research in the paint, varnish and lacquer industry has been temporarily revolutionized in its aim to help to develop the most efficient protective coatings, including concealment or camouflage paints, required by the war machine of our government. Naturally, the greater part of this research and its results have been and necessarily must be kept confidential, but when the day arrives "when it can be told" the story will reflect great credit upon the patriotism and resourcefulness of the members of the paint, varnish, and lacquer industry and their national association. Coincident with this service, the national association has kept its members advised of the changing picture in government specifications through bulletins made possible by its close contact with the government agencies concerned with paint formulations.

Replacements of types of material which have become difficult or impossible to obtain is a constant concern with the association, and every practical suggestion which is developed in this connection is made available to members — a service which will continue to be a consistent practice of the association.

Despite raw material difficulties the sales of the industry in the first ten months of 1941 have risen to unprecedented heights, and are still zooming.

The record for the first ten months, of 1941, including October, shows that paint sales gained 34.1 percent, and for the month of October, 30.1 percent. Analysis of the Bureau of the Census report of paint, varnish, and lacquer sales by 579 establishments for the first ten months of 1941 shows the following gains by classifications over the corresponding period for 1940:—

Trade Sales—25.5 percent gain in first ten months; 21.8 percent above October, 1940.

Total Industrial Sales—43.7 percent gain in first ten months; 33.6 percent above October, 1940.

Industrial Paint and Varnish Sales —44.7 percent gain in first ten months; 38.3 percent above October, 1940.

Industrial Lacquer Sales—41.2 percent gain in first ten months; 23.3 percent above October, 1940.

Unclassified Sales—36.1 percent gain in first ten months; 37.7 percent above October, 1940.

Compared with 1929, previous high year, total sales for first ten months were up 17.9 percent and for October 36.7 percent greater.

In connection with sales, the national association has maintained and is continuing a weekly service of information to members who are interested in the weekly contracts for war supplies involving the use of paint, varnish, and lacquer materials.

Each and every activity of the national industry, operating from association headquarters in Washington is rendering important and practical service in aiding the membership to mesh successfully and as smoothly as possible with the rapidly changing and often perplexing conditions.

The industrial finishes division, the trade sales division, the unfair competition bureau, traffic bureau, the scientific section, the trademark bureau, the clean up and paint up campaign bureau, and the save the surface campaign are all doing their respective parts with high credit and benefit to the industry.

The basic attitude of the industry as presented at the 1941 convention, where it was unanimously adopted by the convention, is as follows:—

This meeting reaffirms the industry's traditional policy of fair dealing with the public and recommends to all manufacturers that we continue:—

(1) To maintain the high reputation of our industry and keep faith with the public by continuing to sell our products at fair prices, and to advocate to our customers that they do likewise with their resale prices.

(2) To refrain from any discriminatory practices in our relations with our customers.

(3) To play fair with our suppliers.

(4) To conserve supplies of raw materials by preventing waste in any form, by making replacements for critical materials wherever possible and reserving critical materials for use where no other product can be employed.

(5) Except as may be ordered by the government in specific cases, to refrain from hoarding raw materials or overstocking supplies which may be required for defense purposes or which as a matter of equity may be needed by others.

(6) To cooperate in the program of simplification recently promulgated by the Department of Commerce affecting the paint, varnish and lacquer industry and to put into effect futher simplification where it can consistently be done.

What is our industry's outlook for 1942?

It would be futile to attempt to answer that question in specific terms. Broadly speaking, the great economic fabric which provides goods and services, wages and salaries—and taxes —will have to be kept in operation for our national self-preservation—although in a continual state of adjustment with the war-time needs of the government which must always be given priority.

In the industrial division of our industry, the demand for industrial finishes which will be required by the government in 1942 seems certain to surpass the record output of 1941. While meeting this demand from the government, prudent manufacturers will continue to cultivate and counsel their old and regular customers and wherever possible suggest workable replacements and changes in formulas to offset the increased difficulties in obtaining many imported raw materials occasioned by the war in the Pacific and the enemy threat to shipping in the Atlantic, and domestic shortages. It is essential to the future welfare of the industry that manufacturers in other lines who use the products of our industry to finish and protect their own products be kept in business and functioning as far as is found consistent with the government's requirements.

In the trade sales field it would be a grave and disastrous error for our industry to conclude that what goods it has to sell or is able to make after the government requirements have been met will sell themselves and thus render promotion and advertising superfluous. On the contrary, we have a very serious job before us to maintain the paint consciousness of the American people, and to compete with other industries for our share of what is left of the consumer's dollar after the consumer has paid his taxes, bought his defense bonds and coped with rising living costs. Relatively, the situation will call for more intense effort than in normal times, and the more thoroughly and consistently we do the job, the better off we shall be when the war ends, and the more readily we shall make the inevitable transition from war time to peace time business. This service need not conflict with the supply of industrial goods to the government, for consumer requirements are more elastic and may be met by the use of other formulas for making good paint.

The task immediately ahead will call for the best effort of our industry in national promotional activities for insuring, stabilizing and advancing the prosperity of the industry, with as little loss of balance as possible.

We are fortunate in that the clean up-paint up-fix up campaign is a "natural" in tuning in with the government's broad program for the conservation of property and materials and the advancement of the public morale, health and safety. The government's request through the Consumer Division of the Office of Price Administration for a consumer's pledge, "I will take good care of the things I have" reflects the basic aims of the clean up-paint up-fix up campaign, which, in addition to its work of national conservation through the protection and improvement of property, will do valuable work as a gleaner of waste material in the course of the house-to-house canvasses in the respective cities and communities in which the campaign will operate. The adaptibility of the clean up-paint up-fix up campaign to wartime conditions is exemplified by recent reports by the Cincinnati Chamber of Commerce, showing that, while operating during the national emergency which prevailed throughout 1941, the activities recorded in the house-to-house canvass were 8 percent greater than in the preceding year of 1940.

Our save the surface campaign will continue to emphasize the protective necessity of paint while making clear that beauty automatically accompanies the application of paint, and that styling with paint through intelligent choices of color combinations does not call for an ounce more of material or additional cost.

The entire organization of the paint, varnish, and lacquer industry is enlisted to aid to its utmost in the triumphant culmination of the victory program. It will continue to leave no stone unturned in helping to pilot its members through the rapids and whirlpools which lie ahead.

Its slogan, which is being used by the industry in increasing measure, and which reflects the basic service of the industry of the Nation is:—"Paint Protects America!"

Charles F. Walden

President, American Gum Importers Association

During the past year, gum importers have been rather fortunate in being able to obtain quite satisfactory shipments from primary sources, due to the assistance given by the Maritime Commission in Washington, in the allocation of steamer space, principally from Singapore and Batavia. Some months ago, natural resins were placed on the critical list by OPM, in recognition of the possible demand by the paint, lacquer, and varnish industry for this material, in view of the proposed curtailments in the manufacture of synthetic resins, and at the suggestion of our government, gum importers built up a fairly substantial stock of these resins without causing any appreciable advance in prices.

Under date of December 9, last, OPM in Washington issued a freezing order on all stocks of natural resins as of that date, in order to conserve such stocks, and are now attempting to work out a fair and equitable plan for distribution for direct defense requirements and such requirements that are essential to prevent immediate shutdown of manufacturing plants. December 15, Mr. Leon Henderson placed a price ceiling on all natural resins at the level prevailing December 5, 1941.

As regards the outlook for 1942 on natural resins, further supplies arriving from the Far East depend entirely on the war activity in the immediate vicinity of Singapore and the Dutch East Indies. Naturally, a great effort is being made to keep open the shipping lanes from Singapore and Batavia, due to the urgency of raw materials, principally rubber and tin, and it is generally believed that further supplies of natural resins will be available as long as our navy will be able to protect the shipping lanes over which such vital and essential raw materials are carried.

H.S. Wherrett

Vice-Chairman, Pittsburgh Plate Glass Company, Pittsburgh

America's battle for national survival has taken precedence over all other activities of business and industry, and all our actions will be directed toward this primary objective. The Pittsburgh Plate Glass Company, along with all American industry, is feeling to an increasing degree the rising tempo of the war program. Peacetime needs have been subordinated to "all-out" war, and the future course of all business will be guided largely by whatever new measures are needed to preserve "our way of life."

Although few of our products can be classed as direct defense materials, a substantial portion of the business of the Pittsburgh Plate Glass Company has shifted to war channels. The company's chemical facilities have been enlarged to produce additional quantities of alkalies and chlorine, which are defense necessities.

—*Continued on page* 125

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To most Americans, National Defense means today's marching men, submarines, planes, tanks, guns and other material.

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Heavy Chemicals

Uniform Acetic Acid Works Tank Price Ceiling Established —Schedule for Other Packings and Export Revised Upward —Tin Curtailment Limits Deliveries of All Compounds

The revision in the price ceiling for acetic acid provided the outstanding development in the market for heavy chemicals. A uniform ceiling was set for tank cars, whether natural or synthetic, on an f.o.b. works basis. Schedule for other packings in car lots and less car lots were revised upward, excluding the cost of containers from all the maximum prices. A separate ceiling was set up for the Pacific Coast. Special provisions were provided for export sales, allowing premiums according to quantity, excepting sales to Canada and Mexico. Most producers were conforming with the maximum prices for new business and spot transactions. However, contract prices will not be affected immediately.

Producers were well booked ahead, and limited consumers' shipments to previous allotments over the past twelve months. In many instances where materials were needed for defense, some paring down was necessary. A great deal of uncertainty prevails at the moment because the acceleration of defense efforts will bring about drastic changes in manufacturing processes during the transition period.

One leading seller of tin derivatives has informed customers that the rigid restrictions placed on the use of tin will limit deliveries of various tin salts to fifty percent of the amount used in the corresponding period of 1940. This will be done by allocating on a pro-rata basis.

Paper production, as a percentage of six-day capacity, was 102.8 percent in week ended January 3, according to the American Paper and Pulp Association. This compares with 80 percent in the previous week, and 80.8 percent a year ago.

Alums.—Shipments moved steadily against contracts, while prices were firm.

Alumina Sulphate.—Sellers concentrating on regular consumers needs, and market position very firm.

Ammonia, Anhydrous.—Defense and civilian needs absorbing output. Prices rule firm.

Ammonia, Aqua.—Supplies tight, and demand steady. Prices were firm.

Ammonia Bicarbonate.—Consumers made replacements steadily. Prices experienced no change.

Ammonia Nitrate.—Bulk of material moving to defense channels. Prices held the same.

Ammonia Phosphate. — Offerings limited. A firm price tone remained in evidence.

Ammonia Sulphocyanide.—Domestic production taking care of most inquiries. Prices lacked change.

Ammoniac, Sal.—Demand held at good levels. No change occurred in the prices.

Antimony Oxide.—Business confined to regular channels for normal needs. Prices ruled firm.

Barium Salts.—A good buying interest and tightening in supplies prevailed for most barium derivatives. Prices unchanged and firm.

Bleaching Powder. — Bookings steady, and offerings restricted. Prices stabilized at levels now in force.

Calcium Carbide.—Demand active, and market in strong position.

Calcium Chloride.—Good seasonal movement for ice control. Prices display firmness.

Carbon Tetrachloride. — Priority control governs movement of material to consuming channels. Prices held firm.

Chlorine.—Scarcity continues, and material will be placed under complete allocation February 1. No change developed in the prices.

Cobalt Oxide.—Shipments allocated, and prices held at same levels.

Copper Salts.—Privately imported metal placed under full priority control by OPM. Other steps taken to tighten control. Offerings of derivatives remains limited.

Copper Sulphate.—Demand heavy for civilian and defense needs. Prices unchanged and firm.

Fluorspar.—Market position firm, and supplies tightening.

Glauber's Salt.—Shipments steady. No change disclosed in the prices.

Lead Acetate.—Offerings limited. Prices firm.

Manganese Dioxide.—Withdrawals proceeded steadily against contracts. Prices firm at levels established recently.

Manganese Sulphate. — Anhydrous

Price Changes

Advanced

Acetic acid, com'l, 20c. to 56c. per 100 lbs.
glacial, syn., c.l., 70c. per 100 lbs.
tanks, syn., 1c. per lb.
pure, 20c. to 56c. per 100 lbs.

Reduced

None

Comparative Values

Index numbers compiled from twenty-five typical chemicals on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
168.9	168.9	168.8	158.8

Index numbers compiled from twenty typical acids on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
116.0	115.8	115.4	101.6

Market news that may have developed after this report was sent to press will be found on page 4.

Soda Cyanide

Imports of soda cyanide from Canada during the first nine months of 1941 amounted to 52,315,900, and exceeded all previous records for any twelve month period in the last fifteen years. Shipments to this country during the entire year of 1940 totaled 50,410,500 pounds.

While no official figures on domestic production are available, soda cyanide is manufactured in this country by a few concerns. Output has been expanded in recent months to take care of the greatly increased needs in the metallurgical field as a result of the defense program. It finds its principal uses in electroplating, and as a flotation agent in the separation of ores.

Larger quantities have been going into the production of metalic cyanides, while the rapid expansion in domestic production of sulphocyanides called for more soda cyanide. It is also used in the processing of ferrocyanides and ferricyanides.

Prices have remained stable, undergoing no change since the beginning of the war in September, 1939. No quotation was available prior to the first World War, but in 1918 material was quoted at 18c. per pound. Current price ranges from 14c. to 15c. per pound, according to quantity.

Current prices on heavy chemicals are given in the alphabetical list of prices beginning on page 9

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SODIUM ARSENATE
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POTASSIUM, AMMONIUM, BARIUM, CALCIUM, and STRONTIUM
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PROVIDENCE RIDGEFIELD, N. J. CHICAGO

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material in short supply, reflecting raw material situation. Prices nominal.

Nickel Salts.—Domestic consumers supplied with normal requirements. Prices lacked change.

Phosphorus.—Defense needs absorb good portion of supplies to keep market position tight.

Potash Carbonate.—A firm price tone characterized the trading, and shipments continued steady to all channels.

Potash, Caustic.—New business limited as sellers were well booked ahead on contracts. Prices unchanged.

Potash Chlorate.—Defense and regular consumers needs take available output. Prices were firm.

Saltcake.—Shipments moved direct to consuming channels. Prices were firm.

Saltpeter.—Prices firm at levels established preceding period. Demand steady.

Soda Acetate.—Supplies tight. Price-wise a firm tone prevailed.

Soda Ash.—Demand active. A firm tone characterized the trading.

Soda Bicarbonate. — Shipments steady. No change occurred in the prices.

Soda Bisulphite.—Situation remains tight, and prices were firm.

Soda, Caustic.—Broad buying movement. Market held firm.

Soda Chlorate. — Offerings well taken, and market in tight position.

Soda Fluoride.—Material in short supply. Most sellers now quoting on works basis instead of freight allowed.

Soda Hydrosulphite.—Sellers unable to cope with all inquiries. Prices held the same.

Soda Phosphate.—Supplies allocated among regular consuming trade. Prices firm.

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Soda Silicate. — Business broad. Prices held at previous levels.

Tin Salts.—The 50 percent curtailment in tin consumption will limit amounts available for various tin derivatives to 50 percent of 1940 production affecting anhydrous tetrachloride, anhydrous stannous chloride, tin oxide and soda stannate.

Zinc Sulphate.—Shipments confined to regular contract for normal needs. Prices rule firm.

Acids

An extensive revision in the price ceilings for all grades of acetic acid provided the outstanding development in the market for acids. A uniform ceiling for natural and synthetic acetic in tank cars, f.o.b. works was established, while upward adjustments occurred in carlot and less carlot prices for all grades, f.o.b. sellers shipping points. Specific provisions were made for exports, allowing premiums, excepting on sales to Canada and Mexico. The revised schedule excludes the cost of containers from all maximum prices.

Demand continued along broad lines for all acids last week. Shipments of sulphuric were active against contracts. Movement of nitric was heavy for defense needs; business in muriatic was broad, while inquiries for hydrofluoric were well sustained. Formic and phosphoric remained tight and there was no improvement in the supplies of oxalic acid.

Acetic.—A single ceiling of 6.93c. per pound, f.o.b. works in tank cars was established for natural and synthetic in a revision of previous price schedule. Prices for barrels, drums and carboys were increased for technical, glacial and pure grades 20c. to 70c. per 100 pounds. Premiums of 1c. to 3c. per pound were established for export sales except Mexico and Canada.

Chromic.—Supplies allocated among regular contract consumers. Prices firm.

Formic.—Market position tight, and demand steady. Prices held the same.

Hydrofluoric.—Demand well sustained, and market in firm position.

Lactic.—Prices firm at levels established preceding period. Good interest.

Muriatic. — Business broad, and prices maintained at same levels.

Nitric.—Defense needs heavy, and market in very firm position.

Oxalic.—Material remained scarce. No change disclosed in the prices.

Phosphoric.—Situation tight. Prices lacked any alteration.

Sulphuric. — Shipments moved against contracts at an active pace. Prices continued firm.

Baltimore, Jan. 7.—Business in sulphuric acid continues about as before, with procedure making deliveries on contract prices, and with those consumers who are not protected by contract, unable to obtain supplies regardless of the market. Meanwhile one producer quotes 60 degree acid at $16 per ton, with 98 percent at $17.83. These figures are not backed by others, who, at the same time say they are making acid only for their own requirements. The producer mentioned holds oleum, at $19 per ton for 20 percent supplies.

Insecticides

Business continued along normal seasonal lines in the market for agricultural insecticides and fungicides last week. Broader movement to dealers and distributors will soon get underway in preparation for the coming consuming period. Inquiries and shipments for export were fairly well maintained. Price developments were lacking, and the tone held firm.

Calcium Arsenate.—Inquiries and shipments moderate. Prices held the same and tone was firm.

Lead Arsenate.—The market experienced no new price developments, while business continued along seasonal lines.

Resale Market

Business in the resale market for heavy chemicals remained quiet last week. Most factors reported that the general uncertainty combined with the difficulty in obtaining shipping space were the principal factors in limiting transactions.

White arsenic was quoted at 18c. per pound; barium chloride, 9c. to 10c. per pound; copper sulphate, 5.15c. to 5.75c. per 100 pounds; carbon tetrachloride, 18c. per pound; red phosphorus, 95c. per pound; potash carbonate, 9½c. per pound; caustic, potash, 9¼c. per pound; potash chlorate, 46c. per pound and potash metabisulphite, 53c. per pound.

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War Production Ass'ns Plans Cleared by OPM

—Continued from page 5

and obtain detailed instructions. After this is done and a definite organization plan has been worked out, the plan should be submitted, as before, to the nearest Division of Contract Distribution field office.

Now, however, the Division of Contract Distribution does not have to take up all proposed associations with Washington officials of the Department of Justice. Under authority granted by Mr. Arnold, association plans originating in the area from Chicago to the West coast may be taken up and cleared directly by the division of Contract Distribution field offices with the nearest field offices of the Antitrust Division.

War production associations are made up in many instances of small manufacturers who, individually, can do little for defense; but who, collectively, can handle substantial war contracts or subcontracts.

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Synthesizing Drying Oils

—Continued from page 7

onstrated by the following procedure: 2 grams of metallic sodium are dissolved in 100 cubic centimeters of butyl alcohol and varying quantities of this basis reagent solution are then added to samples of linolic acid, together with additional butyl alcohol, to complete the solution. Each of the sample solutions should be sealed in glass after partial evacuation and heated for three hours at 120° C. The results of this procedure are as follows:—

Sample.	Quantity of linoleic acid c.c.	Quantity of basic reagent (sodium butylate) c.c.	Abs Quantity of butyl alcohol c.c.
First	0.5	0	10
Second	0.5	1	9
Third	0.5	3	7
Fourth	0.5	5	5
Fifth	0.5	10	0

While I have not finally deter the mechanics of the reaction, believed that the basic reagent not act as a mere catalyst but into the reaction and that the of the reaction is proportional excess of the basic reagent wh present over the stochior equivalent. However, I do no tend that this proposed theory s be regarded in any way as a l tion upon my invention.

(To be continued)

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Brazilian Information Bureau city, has been renamed Brazilian ernment Trade Bureau.

TO SHEFFIELD FOR PLATE

TO BARRETT FOR COAL-TAR CHEMICALS

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CRESYLIC ACIDS
XYLENOLS
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CUMAR*
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RUBBER COMPOUNDING MATERIALS
COAL-TAR BASES
(Pyridine, Quinoline, Picolines, etc.)
PICKLING INHIBITORS
BENZOL
TOLUOL
XYLOL
SOLVENT NAPHTHA
HI-FLASH SOLVENT
FLOTATION REAGENTS
ANHYDROUS AMMONIA
HYDROGENATED COAL-TAR CHEMICALS
Cyclohexane 98-100%
Methylcyclohexane 98-100%
Cyclohexanol 98-100%
Methylcyclohexanol 98-100%
Cyclohexanone 98-100%
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Coaltar Chemicals

Brisk Inquiry and Limited Supplies Characterizes Business —All Basic Products Active — Benzol Shipments Steady —Buying of Intermediates and Colors Remains Heavy

An active demand and shortage in supplies continued to prevail in the market for most coaltar chemicals last week. The increased war efforts called for additional supplies for military needs, and further restricted civilian shipments. The market felt little effects of the usual inventory period, since allocations and scarcities have kept consumers inventories at very low levels. While export business under the lease-lend act was expected to be continued at high levels, shipments in other directions have been decidedly limited by export control licenses. A firm price tone prevailed, with schedules maintained at previous levels.

Basic products as a group moved in good volume. Benzol was taken steadily; toluol moved almost entirely to defense channels, while situation in xylol underwent little change from recent weeks. Deliveries of cresols, cresylic acid and phenol were under complete allocation. Sellers were well booked ahead against contracts for creosote oil. Output of naphthalene was well absorbed.

Demand for intermediates remained heavy. The requirements for defense called for large quantities of alphanaphthylamine, anilin, anthraquinone, betanaphthol, dimethylanilin, dinitrotoluene, monochlorobenzene and phthalic anhydride. In coaltar acids anthranilic, maleic, salicylic sulphanilic and tobias were in active demand. Buying of coaltar colors continued at an accelerated pace.

Basic Products

Benzol.—A firm tone governed the dealings. Withdrawals active.

Carbazole. — Shipments steady. Prices ruled firm.

Coaltar.—Crude and refined in good demand. Prices underwent no alteration.

Creosote Oil.—Offerings well absorbed and sellers were well booked ahead against contracts. Pricewise a firm tone prevailed.

Cresols. — Allocations determined shipments of the various grades. Prices held unchanged and tone firm.

Cresylic Acid.—Domestic acids in short supply and supplies allocated. Spot offerings of imported light. Prices remain firm.

Naphthalene.—An active interest continued and output was well absorbed. A firm price tone remained in evidence.

Phenol.—Demand exceeds production and shipments under allocation. Prices were stabilized at current levels.

Pitch, Coaltar.—Inquiries steady. No new price developments took place.

Pyridin.—Withdrawals sustained at good levels. Prices lacked any change.

Tar Acid Oils.—Situation continued tight, while deliveries were allocated. Prices display firmness.

Toluol.—Defense requirements sufficient to take practically all available material. Prices firm.

Xylol.—Demand steady and position of market continued tight. Prices were firm.

Chicago.—Buyers are placing orders for fairly substantial quantities of materials. Benzol is in good call. Sellers of most products are cautious in commiting themselves. Ruling prices exclusive of tax are:—Benzol, 90 percent, 15c. per gallon; motor benzol, 8c. to 9c. per gallon; toluol, 28c. per gallon; 10-degree xylol, 27c. per gallon; solvent naphtha, 27c. per gallon; creosote oil, grade 1, 15½c. per gallon.

Price Changes

Advanced

None

Reduced

None

Comparative Values

Index numbers compiled from twenty typical coaltar products on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
130.1	130.1	129.3	126.6

Market news that may have developed after this report was sent to press will be found on page 4.

Coaltar Acids

Anthranilic. — Market continued tight and prices were unchanged.

Benzoic.—Technical grades in steady demand and quotations ruled firm.

Broenner's.—Usual consumers made steady replacements.

Cleve's.—Business moderately active and price tone firm.

Fumaric.—Inquiries and shipments remain brisk. Prices were firm.

Gamma.—Transactions routine. No change disclosed in the prices.

H.—Supplies well taken and market very firm.

Maleic.—Active demand, with market position tight.

Malic. — Withdrawals moderate; pricewise a firm tone prevailed.

Picramic.—Steady inquiry. Nothing new occurred in the prices.

Salicylic.—Offerings limited and market in short supply.

Sulphanilic.—Market tight. Prices displayed firmness.

Tobias.—Demand held steady. Prices remain the same and tone firm.

Other Intermediates

Alphanaphthol. — Supplies limited and demand steady. Prices firm.

Alphanaphthylamine.—Active buying for defense and civilian needs.

Anilin.—Material scarce as government needs increase. Prices firm.

Picric Acid

War developments will hasten the expansion of picric acid production in this country. During 1941 plans were announced by the War Department to construct a plant in the Midwest to produce picric acid at a cost of $16,750,000.

While during normal times picric acid is used as the starting point in making several dyestuffs, it is also an important material for making explosives and military gases. Prior to the first World War large quantities went into the processing of explosives. Phenol, which is the basic material in making picric acid, has been placed under complete allocation by the government.

In contrast to the last war, no fluctuation occurred in the price, which held at 35c. per pound for a long period. At the start of 1914, quotations ranged from 50c. to 55c. per pound and in 1916 prices reached the peak of $1.50 to $2 per pound.

Current prices on coaltar products are given in the alphabetical list of prices beginning on page 9

Association Meetings:—

American Ass'n, Textile Chemists and Colorists, New York Section, Chemists' Club, January 23.

Anthraquinone.—Situation continued tight and prices underwent no change.

Benzaldehyde. — Technical grades taken steadily against contracts.

Benzidin Base.—Shipments held at good levels to keep market firm.

Betanaphthol.—Inquiries brisk and market in very firm position.

Betanaphthylamine.—Available offerings well absorbed. Prices firm.

Diethylanilin. — Steady demand. Prices lacked change.

Dimethylanilin.—Inquiries exceeded available supplies. Prices unaltered.

Dinitrobenzene. — Good movement to all channels. Prices remain firm.

Dinitrophenol.—Business steady. No change occurred in the prices.

Dinitrotoluene. — Market position tight under heavy defense needs.

Diphenyl.—Firm price tone characterized the market, while no let down occurred in the demand.

G. Salt.—Dealings remain routine. Prices failed to change.

Metanitroparatoluidin. — Offerings limited and tone of market firm.

Monochlorobenzene. — Prices unchanged and firm, while demand was heavy.

Orthoanisidin. — Interest continued steady. Prices without change.

Orthochloroanilin. — Consumers exerted a good interest to keep market firm.

Orthochlorophenol. — Business held to regular channels as a rule.

Orthocresol. — Deliveries allocated. Prices firm.

Orthodichlorobenzene. — Available supplies well taken. No change in the prices.

Orthonitroanilin. — Active demand. No change disclosed in the prices.

Orthonitrotoluene. — Shipments moved direct to consuming channels. Prices remain the same.

Parachlorophenol.—Business moved steadily. Prices without alteration.

Paranitroanilin. — Brisk inquiry. No change in the quotations.

Paranitrophenol. — Good interest. Nothing new developed in the prices.

Paranitrotoluene. — Offerings well absorbed. Market tone held firm.

—*Continued on page* 102

Methanol Prohibited For Antifreeze Use

—*Continued from page* 4

on order with other producers or distributors for delivery during such month, do not exceed one-twelfth of the quantity of methyl alcohol used by such persons for such purposes during the twelve-month period ended September 30, 1941, are hereby assigned preference rating B-8."

(2) Present paragraphs (e), (f) and (g) are hereby relettered and made paragraphs (f), (g) and (i), respectively.

(3) A new paragraph (e) is hereby added to read as follows:—

"(e) Restrictions on Use. Except as may be otherwise directed by the Director of Priorities, on and after January 1, 1942, no person shall use or deliver methyl alcohol for manufacture into, or packaging as, an antifreeze agent. The provisions of this paragraph shall apply with respect to stocks of methyl alcohol on hand as of January 1, 1942. Persons who have stocks of methyl alcohol on hand on said date, which said stocks were intended for manufacture into, or packaging as, an antifreeze agent, shall forthwith report such fact (and the details thereof) to the Chemicals Branch of the Office of Production Management and shall hold such methyl alcohol for disposition by the Director of Priorities. Provided, however, that nothing herein contained shall prevent any person from using or delivering methyl alcohol for manufacture into, or packaging as, an antifreeze agent to fill actual orders received for delivery to or for the account of:—

(i) The Army or Navy of the United States, the United States Maritime Commission, the Coast and Geodetic Survey, the Coast Guard.

(ii) The government of any of the following countries:—The United Kingdom, Canada, and other Dominions, Crown Colonies and Protectorates of the British Empire, Belgium, China, Greece, the United Kingdom, Canada, and other Dominions, Crown Colonies and Protectorates of the British Empire, Belgium, China, Greece, the Kingdom of the Netherlands, Norway, Poland, Russia, Yugoslavia; and

(iii) The government of any country, including those in the Western Hemisphere, comprehended in the act of March 11, 1941, entitled 'An Act to Promote the Defense of the United States' (lend-lease act)."

(4) A new paragraph (h) is hereby added to read as follows:—

"(h) Appeals. Any person affected by this order who considers that compliance therewith would work an exceptional and unreasonable hardship upon him, or that it would result in a degree of unemployment which would be unreasonably disproportionate compared with the amount of methyl alcohol conserved, or that compliance with this order would disrupt or impair a program of conversion from non-defense to defense work, may appeal to the Office of Production Management, Reference:—M-31, attention Chemicals Branch, setting forth the pertinent facts and the reason he considers he is entitled to relief. The Director of Priorities may thereupon take such action as he deems appropriate."

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Dr. Ittner Receives Perkin Medal

—*Continued from page* 4

trochemical Society and the Societe de Chimie Industrielle. Dr. Lincoln T. Work presided.

Sidney D. Kirkpatrick, editor of *Chemical and Metallurgical Engineering*, spoke on the personal side of the medallist's life, and Dr. Foster Dee Snell, president of Foster D. Snell, Inc., spoke on his technical accomplishments. The medal, which is awarded annually by the American Section of the Society of Chemical Industry for outstanding work in applied chemistry, was presented by Dr. Marston T. Bogart, following which Dr. Ittner gave an address on the subject "Forty-five Years of Chemistry in a Soap Plant."

For almost forty-five years Dr. Ittner has been in charge of research at Colgate-Palmolive-Peet Company or predecessor companies. Among Dr. Ittner's many contributions is his development of a successful commercial process for the hydrogenation of fatty oils, on which process he has been granted a number of patents. He has also made valuable contributions in the field of distillation and he holds several recent patents pertaining to new processes for glycerin production, and fatty acid distillation. He holds patents for the counter-current hydrolysis of fats with water to fatty acids and gylcerin.

In Dr. Ittner's speech, which followed his acceptance of the medal, he traced the development of important improvements in the manufacture of soap during the past forty-five years. These included devising means for preventing the development of rancidity in soaps, the development of some successful catalysts and methods of hydrogenation, the manufacture of certain synthetic organic chemicals to suitably replace important natural perfume materials when supplies were scarce.

Dr. Ittner also told of the development of a method for making an improved soap from petroleum hydrocarbons by converting certain objectionable acidic materials, formed by the oxidation of petroleum hydrocarbons, into soaps with desirable properties, while removing certain objectionable impurities.

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Purocaine Enlarges Quarters

Purocaine Chemical Company has removed to its own building at 9-20 Thirty-eighth avenue, Long Island city. This move represents considerable expansion due to the demand for its products which are:—U.S.P. Procaine hydrochloride, C.P. procaine base, sodium methyl arsonate, nicotinamide and nicotinic diethylamide.

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Houghton, Inc., Moves

Boston, Jan. 5, 1942

Philip A. Houghton, Inc., manufacturers' representative in New England, has moved its headquarters to new offices at 30 Huntington avenue, this city. They formerly were located at 113 Lincoln street, this city.

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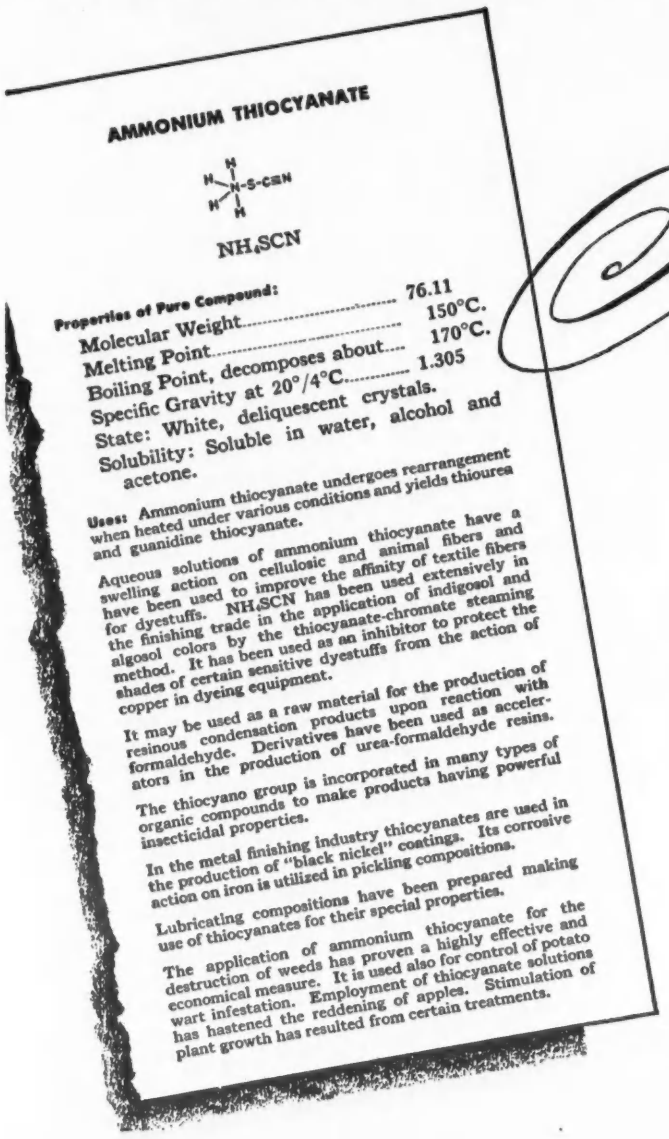
Robert J. McClelland, Chicago divisional general manager for Levey Ink Company, has been named industrial specialist in inks to the printing and publishing branch of the Office of Production Management.


AMMONIUM THIOCYANATE
NH4SCN
Properties of Pure Compound:
Molecular Weight 76.11
Melting Point 150°C.
Boiling Point, decomposes about 170°C.
Specific Gravity at 20°/4°C 1.305
State: White, deliquescent crystals.
Solubility: Soluble in water, alcohol and acetone.
Uses: Ammonium thiocyanate undergoes rearrangement when heated under various conditions and yields thiourea and guanidine thiocyanate.
Aqueous solutions of ammonium thiocyanate have a swelling action on cellulosic and animal fibers and have been used to improve the affinity of textile fibers for dyestuffs. NH4SCN has been used extensively in the finishing trade in the application of indigosol and algosol colors by the thiocyanate-chromate steaming method. It has been used as an inhibitor to protect the shades of certain sensitive dyestuffs from the action of copper in dyeing equipment.
It may be used as a raw material for the production of resinous condensation products upon reaction with formaldehyde. Derivatives have been used as accelerators in the production of urea-formaldehyde resins.
The thiocyano group is incorporated in many types of organic compounds to make products having powerful insecticidal properties.
In the metal finishing industry thiocyanates are used in the production of "black nickel" coatings. Its corrosive action on iron is utilized in pickling compositions.
Lubricating compositions have been prepared making use of thiocyanates for their special properties.
The application of ammonium thiocyanate for the destruction of weeds has proven a highly effective and economical measure. It is used also for control of potato wart infestation. Employment of thiocyanate solutions has hastened the reddening of apples. Stimulation of plant growth has resulted from certain treatments.

Can you use

Ammonium Thiocyanate

(Ammonium Sulfocyanide)

at substantially lower cost?

Koppers has placed in operation a large commercial plant for the production of ammonium thiocyanate crystals. Supplies are now available in quantities not obtainable before and at costs which make ammonium thiocyanate practical for purposes for which it has not been used in the past.

Chemists and Manufacturers who have previously investigated the possibilities of Ammonium Thiocyanate should reconsider its use in view of this increased supply and reduced cost.

Koppers Ammonium Thiocyanate can be supplied in crystal form, having minimum purity of 95%.

Samples, Quotations and Further Information on Request

KOPPERS COMPANY
TAR AND CHEMICAL DIVISION
PITTSBURGH, PENNSYLVANIA

Coaltar Chemicals

Other Intermediates

Continued from page 101

Phthalic Anhydride. — Demand heavy, market position tight. Prices unchanged and firm.

Thiocarbanilide. — Withdrawals steady. Pricewise the market was firm.

Trichlorobenzene. — Active buying. Prices held at previous levels.

Xylidin.—Market position continued tight, and prices held firm.

Coaltar Colors

Demand continued at an accelerated pace in the market for various coaltar colors last week. The raw material situation still was a matter of concern as government requirements for military purposes will expand under the total war effort. Some provisions are expected to be made for supplies that would go into direct defense work. Business continued to be characterized by a firm price tone.

The Textile Color Card Association has appointed an advisory committee composed of representatives of leading dyestuff producers in order to make sure that the colors it issues are obtainable at this time. The function of the committee will be to guide the selection of seasonal colors for textiles, shoes, leather goods and hosiery without affecting the government's needs for vital materials.

Resale Market

The difficulty in obtaining supplies kept business at a standstill in the resale market for coaltar chemicals last week. With offerings restricted in view of heavy defense requirements, stocks in hands of resellers were negligible.

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National Can Corporation's new manufacturing unit at West Fifty-first street and South Atlantic avenue, Chicago, is rapidly nearing completion.

Chemical Workers Show Decrease

—Continued from page 5

Detailed Comparisons

Employment

(100=1923-25 average)

	1941 Nov.	1941 Oct.	1940 Nov.
Chemicals	265.2	249.4	181.7
Cottonseed oil, cake and meal	125.9	146.5	128.8
Druggists' preparations	189.9	183.4	131.1
Fertilizers	99.5	102.7	76.5
Paint and varnishes	170.0	173.7	135.7
Petroleum, refined	166.1	168.0	133.3
Rayon and allied products	384.8	386.4	331.4
Soap	138.4	142.2	100.2

Payroll Totals

(100=1923-25 average)

	1941 Nov.	1941 Oct.	1940 Nov.
Chemicals	183.3	182.5	148.6
Cottonseed oil, cake and meal	117.7	136.0	132.8
Druggists' preparations	148.4	145.6	116.2
Fertilizers	102.3	103.6	92.1
Paint and varnishes	142.6	144.0	125.9
Petroleum	128.5	129.2	120.7
Rayon and allied products	322.3	325.0	314.5
Soap	96.4	97.7	84.5

Data compiled by the Bureau of Labor Statistics for basic non-manufacturing industries related to the chemical industries afforded the following comparisons on the basis of the 1939 average):—

	Employment 1941 Nov.	Employment 1941 Oct.	Payroll totals 1941 Nov.	Payroll totals 1941 Oct.
Metalliferous mining	79.3	79.4	90.3	88.4
Quarrying and nonmetallic mining	52.8	53.8	57.5	60.8
Crude petroleum producing	61.0	61.3	62.5	63.0
Dyeing and cleaning	117.2	121.0	92.8	98.4

Employment in New York

Employment in factories producing chemicals and related products in New York State increased 7.8 percent from October 15 to November 15, and gained 13.9 percent in the city, according to the records of the State Department of Labor.

General factory employment declined 0.6 percent from October 15 to November 15, and payrolls dropped 0.2 percent during the same period. The department's index of employment for November 15 was 126.1. The payroll index was 151.3. These indexes are based on the average years 1925-27 as 100.

	Percentages State	Percentages City
Drug and industrial chemicals	+2.0	+2.4
Oil products	—1.3	—1.0
Paints and colors	—0.4	—0.5
Photographic and miscellaneous chemicals	+0.6	+9.7

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Obituaries

William M. Baldwin

William M. Baldwin, prominent in the dyewood and tanning extract manufacturing industry, died January 4 of pneumonia, after an illness of four days, in this city. He was seventy-nine years of age. Mr. Baldwin, a son of Joseph C. Baldwin, president of the New York Dyewood Extract & Chemical Company, was president of several companies making dyewood and tanning extract, eventually retiring after thirty-five active years as a manufacturer.

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Ellsworth C. Warner

Ellsworth C. Warner, former president of the Midland Linseed Products Company, died January 5 at Palm Beach, Fla. He was seventy-seven years of age.

Mr. Warner started in the linseed oil business in 1887 and two years later bought his own linseed oil mill at La Crosse, Wis. Later he sold this mill to the National Linseed Oil Company, becoming manager for that firm at La Crosse, Dubuque and St. Paul. In 1898 he became president of Midland and served in that post until 1924, when Midland was acquired by Archer-Daniels Linseed Company.

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Clayton H. Englar

Clayton H. Englar, Pacific coast sales manager for the Continental Can Company, died January 2, San Francisco, Calif. He was fifty-six years old.

Mr. Englar, after graduating from Blue Ridge College, became affiliated with the Detrick & Harvey Machine Company in 1904, leaving that concern in 1912 to become associated with the Continental Can Company, at Baltimore, as a salesman.

Mr. Englar rapidly advanced from salesman to assistant district sales manager, district sales manager, assistant manager of sales with headquarters at Baltimore. In 1934, he was appointed coast sales manager with headquarters at San Francisco, a position he held at the time of his death.

Surviving are his wife and a son.

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Dr. Leon Pratt Alford, widely known as an industrial engineering expert and author, died January 2 in this city. He was sixty-four years of age.

Henry R. Cockfield, Canadian director of aluminum production and intergovernmental distribution, died January 7 in Montreal. He was sixty-three years of age.

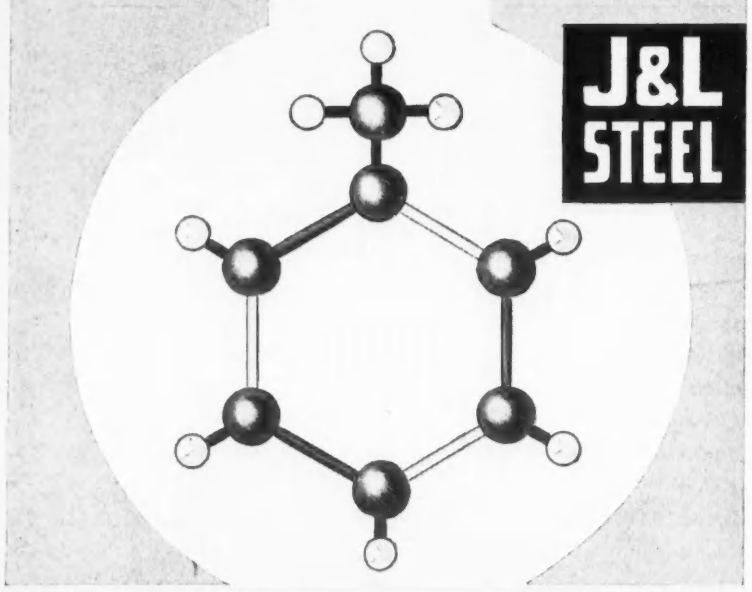
Mrs. Sarah C. Getty, widow of George F. Getty, pioneer Los Angeles oil producer, died recently in Los Angeles. She was eighty-eight years old.

James McGillen, for forty-five years employed by Lanman & Kemp-Barclay & Company, Inc., suppliers of pharmaceuticals, this city, died January 2 at his home in Queens. He was seventy-seven years of age.

Mrs. Benjamin Moore, widow of the founder and first president of the Benjamin Moore & Co., paint manufacturer, this city, died in her home in Montclair, N. J., January 5. Her age was eighty-five. Surviving are her daughter, a brother and two sisters.

Mrs. William A. R. Welcke, wife of the vice-president and treasurer of Fritzsche Brothers, essential oils, this city, died recently at her home in Mount Vernon, N. Y. She was sixty-eight years of age.

J&L TOLUOL



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HIGH QUALITY PRODUCTS MADE BY J&L

BENZOL • TOLUOL • XYLOL • PYRIDINE

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JONES & LAUGHLIN STEEL CORPORATION

AMERICAN IRON AND STEEL WORKS • PITTSBURGH, PA.

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Coal Tar By-Products

DRUMS OR BULK

BENZOL

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CARLOAD TO CARGO

THE COASTWISE PETROLEUM COMPANY

Munsey Building Cable Address: "LUBOYLE" BALTIMORE, MD.

Refinery and Deepwater Terminal, Good Hope (New Orleans), La.

Low Temperature Carbonisation, Ltd.

ENGLAND

Largest manufacturers in the World of low temperature tar acids of the highest possible degree of purity and efficiency.

A considerable proportion of the output is already being exported to North and South America for disinfectants, germicidal products and plastics, in addition to the special high efficiency flotation grade for the mining industry.

This is the first time in history that highly refined tar acids of this type have been made available on a large scale, and remarkably good results are being obtained by our many American buyers.

Please send us a note of your requirements with full particulars to our Sales Agents:—

TAR RESIDUALS, LTD., "Garthlands," Reigate Heath, SURREY, ENGLAND

Dyestuffs, Textile and Leather Chemicals

Business Steady — Tapioca Flour Prices Are Slightly Higher —Government Purchases of Dried Eggs Continues Heavy —Far East Shipments Uncertain — Turmeric Firmer

Business held at a steady pace in the market for dyestuffs, textile and leather chemicals last week. There was less nervousness on the part of buyers regarding imported materials, since sellers made assurances that spot stocks were adequate to serve immediate requirements. Operations in all branches of the textile and leather industry were expected to be maintained at capacity levels because of the increasing defense requirements. Prices held at previous levels with the exception of a moderate advance in tapioca flour and turmeric.

Government buying of dried eggs continued to limit supplies to other channels. Domestic production has been expanded sharply during the past few months, but purchases have been equally as large under defense and lease lend buying. Prices held at top levels as the result of government support. All the new drying plants are expected to be in operation by the Spring, and some easing in the situation was anticipated by that time.

Shipments of tanning materials were generally satisfactory from primary centers. So far cargo space has been available to permit adequate replacements of quebracho and other materials from South America. Wattle bark arrivals from South Africa have not been affected too much, however, it was increasingly difficult to arrange shipments from East Africa. Future replacements of cutch, gambier and nutgalls from the Far East remain uncertain.

Chemicals

Alumina Acetate.—Supplies tight; offerings limited. Prices firm.

Ammonia Bichromate. — Transactions routine. Prices without change.

Potash Bichromate. — Shipments moderately active against contracts. Prices rule firm.

Potash Prussiate.—Business confined to regular consuming channels. Prices unchanged and firm.

Soda Bichromate.—Good movement against contracts, with business allocated. Prices display firmness.

Zinc Dust.—Prices remain firm at ceiling basis. Supplies well absorbed.

Dyestuffs

Annatto.—Consumers made moderate replacements. Prices failed to change.

Fustic.—Demand moderately active. Prices held firm.

Logwood. — Commitments steady. Pricewise a firm tone prevailed.

Soda Prussiate

Despite the stoppage in imports of yellow soda prussiate, domestic supplies were sufficient to take care of regular consumers normal requirements. However, sellers were not booking new business or accepting export inquiries to any extent. Indirectly, the material enters defense channels since it is used in making blue prints, metallurgy, dyestuffs and in tanning.

Prior to the war a good amount of imported material reached the market. The Netherlands formerly supplied sizeable quantities, while starting in 1933 Japan became a large factor. Between the two countries well over a million pounds reached here.

Prices advanced moderately since the start of hostilities in 1939. Spot prices range from 11c. to 11½c. per pound, compared with 9½c. to 9¾c. in August, 1939. During the last war the market reached a peak level of 70c. in 1916. Transactions in the outside or export market currently range from 35c. to 40c. per pound.

Price Changes

Advanced

Tapioca flour, ¼c. per lb.
Turmeric, Alleppey, ¼c. per lb.
Madras, ¾c. per lb.

Reduced

None

Comparative Values

Index numbers compiled from nineteen typical dyestuffs on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
263.8	263.8	253.0	154.0

Market news that may have developed after this report was sent to press will be found on page 4.

Turmeric.—Spot offerings firmer, with Alleppey quoted at 9¼c. to 10c. per pound and Madras 9½c. to 10¼c. per pound.

Sizing Materials

Albumen, Blood.—Active demand; supplies tight. Prices rule firm.

Albumen, Egg.—Prices unchanged and firm. Government buying continued heavy and in week ended January 3 purchases totaled 300,595 pounds.

Corn, Sugar.—Bookings held steady. No change disclosed in the prices.

Egg Yolk.—Supplies lacked any appreciable broadening, with government purchases absorbing good portion of the output. Prices unchanged.

Sago Flour.—Prices held at levels established previously and offerings were limited to normal needs.

Starch, Corn.—A good volume of orders kept market in firm position.

Starch, Potato. — Market position was still tight as new production was slow in getting under way. Prices held firm.

Tapioca Flour. — Prices firmer, ranging from 4¼c. to 7c. per pound. Offerings of higher grade material light. Replacements highly uncertain.

Tanning Materials

Chestnut. — Steady movement against contracts. Prices remain firm.

Cutch.—Prices very firm, and future replacements continued uncertain from Borneo.

Hemlock. — Supplies scarce, and prices strictly nominal.

Nutgalls.—Supplies limited, and replacements uncertain. Prices nominal.

Oakbark. — Offerings light, and prices remain nominal.

Quebracho.—Active interest. A firm price tone governed the dealings.

Spruce.—Market continued in a tight position. Demand steady.

Wattle Bark.—Shipments irregular. Prices held firm.

Resale Market

Transactions in the resale market for dyestuffs, textile and leather chemicals continued narrow. Business was confined to a few chemicals. Potash bichromate was quoted at 26c. per pound; soda bichromate, 24c per pound and potash prussiate, yellow, 37c. to 45c. per pound.

Current prices on dyestuffs and tanstuffs are given in the alphabetical list of prices beginning on page 9

Association Meetings:—

American Ass'n, Textile Chemists and Colorists, New York Section, Chemists' Club. January 23.

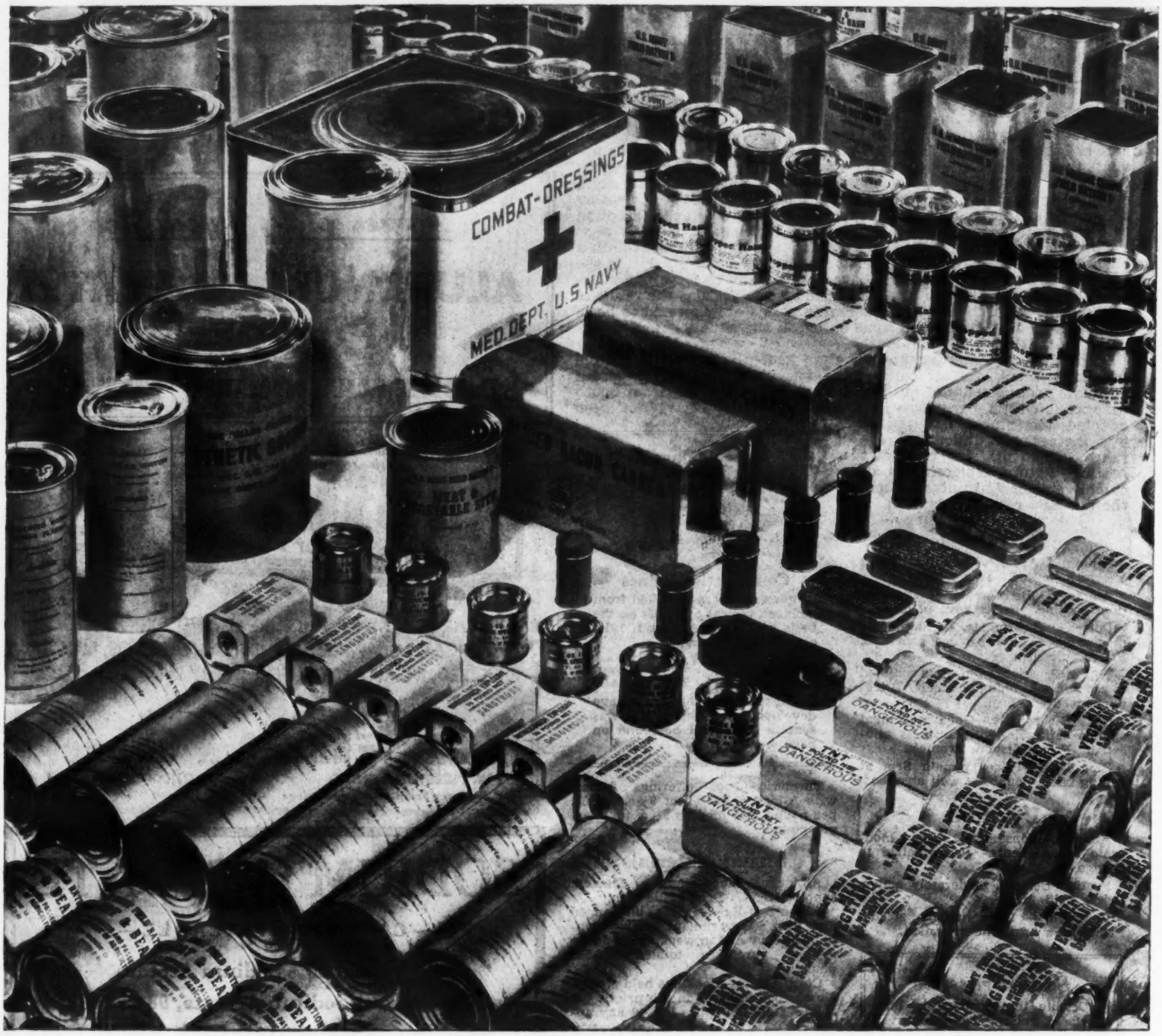
Natural Products Refining Co.
910 Garfield Avenue,
Jersey City, N. J.
Natural BICHROMATES

Immediately Available
ALUMINUM ACETATE POWDER
APPLIED CHEMICAL CORPORATION, 7 WEST 45th STREET NEW YORK CITY

ALBUMENS
In Stock . . . For Immediate Delivery
THE LARGEST MANUFACTURERS AND EXPORTERS OF TECHNICAL EGG PRODUCTS OFFER YOU EGGS, LIQUID OR DRIED, IN ANY FORM FOR EVERY INDUSTRIAL USE.
H. GARTENBERG & CO., Inc.
412 W. PERSHING ROAD CHICAGO, ILLINOIS
Write for Samples and Quotations *Cable Address: "GARTEGG"*

SODIUM ACETATE
—GRADES AVAILABLE—
Technical 60% Sodium Acetate
Anhydrous Sodium Acetate, 98–99.5%
Sodium Diacetate
(33–35% Acidity as Acetic Acid)
Anhydrous Sodium Diacetate
(40–41% Acidity as Acetic Acid)
NIACET CHEMICALS CORPORATION 4703 PINE AVE., NIAGARA FALLS, NEW YORK

MUTUAL BICHROMATES
BICHROMATE OF SODA
BICHROMATE OF POTASH
CHROMIC ACID
MUTUAL CHEMICAL CO. OF AMERICA MUTUAL NEW YORK, N.Y.
MUTUAL CHEMICAL COMPANY OF AMERICA
270 Madison Avenue, New York City



SOME "NON-SECRET" WEAPONS THE AXIS WOULD LIKE TO HAVE

Study The Labels on the cans and packages in the picture above.

On some of them, you'll notice "Army Sliced Bacon, Canned . . . U. S. Marine Corps Field Ration D . . . U. S. Army Meat and Vegetable Hash . . . TNT Dangerous, Corps of Engineers . . . Combat-Dressings, Med. Dept. U. S. Navy."

There's a container for dried human blood in the picture, too. Its use is for blood transfusions in the field. Another to house a delicate motor on anti-aircraft guns.

And while you'll be interested to know that these articles are some of the many defense items the containers for which are made by the can-making and packaging industries, their significance goes far beyond this simple fact.

For they are weapons. "Non-secret" weapons, if you will. And every country has them. *But the Axis would like to have ours.* Do you realize why?

The industrial resources that produced these "non-secret" weapons are the largest in the world. The Axis needs these resources.

It needs the men . . . the machinery . . . the skill . . . the research that make the quality and the quantity of these weapons possible. It needs the energy of the free, unregimented economy which produced these weapons.

We Americans can congratulate ourselves that the Axis hasn't these resources . . . that we—not the Axis—have built the greatest packaging and can-making industries in the world . . . that we are now using the sinews of these industries to resist aggression. *American Can Company, 230 Park Avenue, New York, N. Y.*

Paint, Varnish, Lacquer Materials

Possible Pig Lead Price Advance Holds Interest of Trade —Dual-Price Set Up Believed Doubtful—Paint Materials Markets Steady — Naval Stores Stronger

The possibility of an advance in the price on pig lead held the interest of paint and non-ferrous metals trades last week. Although no official information has been released, it is known that lead producers are agitating for a price of 8c. per pound, with some government officials feeling the price should be lower.

It has been said that a dual price on the metal may be set up, allowing marginal producers an increase to step up production, but this is doubtful. Meanwhile, Representative C. I. White of Idaho said last week that the government is considering purchases of lead under firm contracts for relatively long periods in order to stimulate output.

Developments in market for paint raw materials were negligible last week. Advances in prices on zinc oxides and lithopone had little effect, as suppliers continued to dole out material. Carbon black movement slowed down, many consumers having stocked up before the January 1 advance became effective. Dry colors remained in good call, with tightness dominant. Casein was unchanged.

Southern and local markets for rosin and turpentine were firmer. Business showed some improvement and a steady movement to consumers continued to be reported. Receipts and offerings in Southern markets were generally light or moderate.

Metalic Lead and Zinc

Strong demand continued to appear in the market for pig lead last week as men in the trade and government officials discussed a possible price advance. All orders were not met. Slab zinc remained under strict allocation with prices firm. Slab zinc produced at eleven plants operating exclusively on secondary materials increased from 2,229 short tons in September to 2,458 in October, according to the Bureau of Mines. Stocks of slab zinc at these plants increased from 766 tons on October 1 to 1,075 on October 31.

Lead. — Prevailing spot prices at New York, East St. Louis and London for the period from January 3 to January 9, inclusive, were as follows:—

	Pigs		
	Per pound		Spot. London. Per ton
	New York.	E. St. Louis.	£ s. d.
Saturday	$0.0585@.0590	$0.0570	* .. .. ..
Monday	.0585@.0590	.0570	.. .. ..
Tuesday	.0585@.0590	.0570	.. .. ..
Wedn'sd'y.	.0585@.0590	.0570	.. .. ..
Thursday	.0585@.0590	.0570	.. .. ..
Friday	.0585@.0590	.0570	.. .. ..

* London exchange closed.

Zinc. — Prevailing spot prices at New York, East St. Louis and London for the period from January 3 to January 9, inclusive, were as follows:—

	Slabs		
	Per pound		Spot. London. Per ton
	New York.	E. St. Louis.	£ s. d.
Saturday	$0.0865	$0.0825	* .. .. ..
Monday	.0865	.0825	.. .. ..
Tuesday	.0865	.0825	.. .. ..
Wednesday	.0865	.0825	.. .. ..
Thursday	.0865	.0825	.. .. ..
Friday	.0865	.0825	.. .. ..

* London exchange closed.

Price Changes

Advanced

Alcohol, diacetone, 1½c. per lb.
Butyl lactate, 3c. per lb.
Dibutyl ether, 2c. per lb.
Film scrap, 2c. per lb.
Rosin gum, 3c. to 16c. per 100 lbs.
Turpentine gum, 2½c. per gal.
Turpentine, d.d., 3c. per gal.

Reduced

None

Comparative Values

Index numbers compiled from eleven typical paint and varnish materials on the basis of 100 for August 1 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
139.3	139.3	137.9	128.0

Market news that may have developed after this report was sent to press will be found on page 4.

Titanium Pigments

An amendment to Order M-44, concerned with the production and distribution of titanium pigments, was issued by the Director of Priorities last week. The order, which provides that no producer shall sell or deliver titanium to any manufacturer unless he had first received a certificate covering the latter's monthly requirements for the month in which deliveries were to be made, was amended to provide that such certificates must be received on or before the twentieth of the month prior to the month covered by the certificate, so that producers will be able to close their books in time to calculate pro rata reductions in orders placed, if necessary.

Paragraph (e) (4) of the order, which provides that producers must accept orders from regular customers for titanium equal to or less than the customers' basic monthly purchases in the past, has been amended to prevent seasonal users of titanium from obtaining more than the amount to which they are properly entitled over a full year.

A third amendment redefines the term "producer" to relieve secondary producers from the necessity of setting aside a percentage reserve of their production. This is for the benefit of producers of titanated lithophone who purchase titanium dioxide from primary producers who have already set aside the required reserve from their output.

Paint, Varnish, Lacquer Sales: November

The value of paint, varnish, lacquer and fillers sold in November, as reported by 680 establishments to the Bureau of Census, was $41,367,698. Details of sales reported by these establishments and comparative data for 1940 follow:—

1941.	Total sales reported by 680 establishments.	Classified sales reported by 580 establishments: Trade sales of paint, varnish, and lacquer.	Industrial sales: Total.	Industrial sales: Paint and varnish.	Industrial sales: Lacquer.	Unclassified sales reported by 100 establishments.
November	$41,367,698	$18,804,182	$18,726,637	$13,207,728	$5,518,909	$3,836,879
Total (11 mo.)	$513,690,393	$257,507,747	$208,200,436	$148,773,387	$59,427,049	$47,982,210
1940.						
November	$31,892,256	$15,115,083	$14,048,944	$9,578,739	$4,470,205	$2,728,229
Total (11 mo.)	$384,207,659	$201,635,065	$146,530,179	$102,577,132	$43,953,047	$36,042,415

Current prices on paint, varnish and lacquer materials are given in the alphabetical list of prices beginning on page 9

HOOT MON! PARANOL 25

FOR A MON WI' AN EYE TO LOW COST PRODUCTION

Paranol 25 is a bonny buy . . . and the quality would truly surprise a mon wi' a searchin' pair of eyes!

And listen, mon! The way it works wi' softer oils will make your heart do a highland fling for glee. — Sshish! A sample and data dinna cost ye nothin'.

Our Technical Staff is at Your Service

PARAMET SYNTHETIC RESINS

PARAMET CHEMICAL CORPORATION
MANUFACTURERS OF SYNTHETIC RESINS
44TH AVENUE AND 10TH STREET • LONG ISLAND CITY, N. Y.

CHECK pH WITH THIS HANDY CALCO INDICATOR!

The amount of fluctuation in the pH measure of alkalinity or acidity is a matter of increasing importance in dyeing many different fibres. These fluctuations have explained many variable results that were not accounted for in the past.

This handy Calco pH indicator will assist in determining quickly the relative pH in your operations from day to day. It fits the pocket, yet the transparent plastic case effectively protects its contents against the action of fumes and moisture. Refills of indicator paper are easily inserted.

We are glad to make this indicator available to our friends throughout the Industry.

It is but one of the many practical ways in which we are trying to assist Calco customers to make the most of available materials and their own time.

You can obtain one of these indicators without charge simply by asking your regular Calco representative on his next call. Please do *not* request one by mail or phone.

Calco Dyes are Better Buys
Calco

CALCO CHEMICAL DIVISION
AMERICAN CYANAMID COMPANY
Bound Brook, New Jersey
Boston · Philadelphia · Providence · New York · Charlotte · Chicago

Pigments

Blue Lead.—Fair movement. Prices firm.

Flake White. — Movement large. Price steady.

Litharge. — Demand heavy. Shipments in good volume. No changes in prices.

Lithopone.—Advance in prices had little effect on market. Demand still very heavy, with sales allocated strictly.

CASEIN
From Argentina
•
LOUIS FURTH, Inc.
2 Broadway, New York
Telephone
BOwling Green 9-4557

Orange Mineral. — Market buoyed by large demand. Prices firm.

Red Lead.—Demand maintained at previous levels. Quotations unaltered.

Titanium Pigments. — Sales allocated. Defense industries getting major share of supplies. Prices unchanged.

White Lead. — Consumers bidding actively. Prices firm.

Zinc Oxides.—Similar to titaniums, advance in prices had little effect on market. Sales allocated.

Zinc Sulphides.—Higher prices did not discourage consumers, who attempted to place orders. Market very tight.

Fillers and Extenders

Asbestos.—Market well maintained at advanced levels. Demand good.

Asphaltum. — Good call. Prices steady.

Barytes.—With prices stabilized, demand was heavy and offerings normal.

Blanc Fixe. — Market very tight. Demand good. Prices unchanged.

China Clay.—Movement large. Imported material in fair call. Prices firm.

Diatomaceous Earth. — All grades moving well. Increased freight rates only factor liable to cause advance in prices.

Mica. — Movement held to good levels. Prices steady.

Rottenstone.—Fair demand at unchanged price.

Tripoli.—Tone stable at advanced level. Demand good.

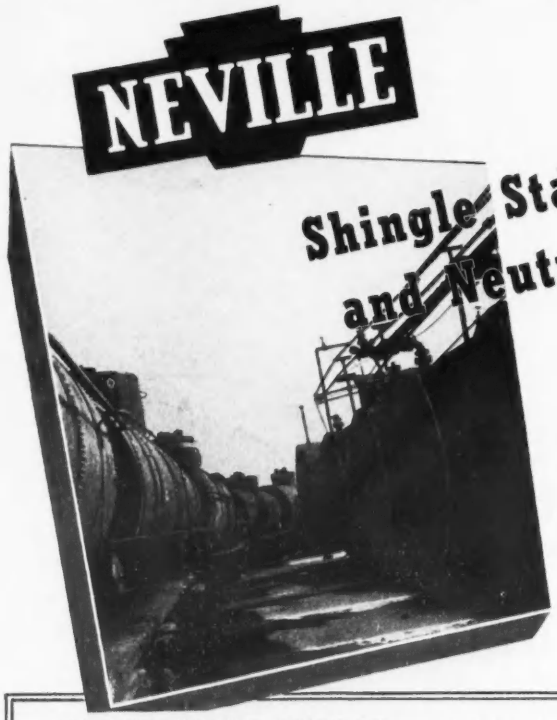
Whiting.—Steady movement. Demand better than normal. Price firm.

Woodflour. — No Norwegian material available.

RED YELLOW IRON OXIDES BROWN BLACK
C. J. OSBORN CO., 132 Nassau Street, New York
Established 1889

ZOPHAR
GILSONITE
ORE IS BOLD AND CLEAN. ALL SCREENED AT THE MINE.
Melting points 275°, 305°, and 330° F.
Carload Shipments from Provo, Utah
L.C.L. Shipments from Brooklyn Warehouse
ZOPHAR MILLS, Inc.
112-26th STREET EST. 1846 BROOKLYN, N.Y.

NEVILLE
Shingle Stain Oil
and Neutral Oil



CLEAR, clean dark red oils. Non-corrosive and of low volatility.

NEVILLE SHINGLE STAIN OIL is suitable for thinning low cost high-baking japans. It is an excellent vehicle for pigmented shingle stains.

NEVILLE NEUTRAL OIL serves as cut-back solvent for tars, asphalts, and other bitumens. Important as inexpensive vehicle for tar acids, or cut-back solvent for tar acid oils, in manufacture of emulsifying-type coal-tar disinfectants, cattle and sheep dips.

• *Inquiries solicited for drums and tank cars. Send for complete brief leaflet "Neville Coal-Tar Products."*

THE NEVILLE COMPANY
PITTSBURGH • PA.
A-1

Synthetic Resins

General market tight, with offerings limited. Most types of resins going into defense work. Fair supplies of ester gum available. Prices steady and unchanged.

Varnish Gums

The trade continued to keep a careful watch over stocks in the United States and to dole out material only when absolutely necessary. Prices have been ceiled at levels of December 5.

Shellac

Business in shellac was steady and without incident last week. Sales were made on the basis of the Office of Price Administration freezing order and there were no reports of any in the trade ignoring the request of OPA. Demand was good and the market at all points was very firm. The solvent situation was not too encouraging, the Office of Production Management having placed ethyl alcohol under an order that controlled disposition to the cosmetic and perfume trade. Some reports had it that the alcohol withdrawn from those trades would not make alcohol any more readily available to the lacquer and finishes industry. The saving will be diverted to war purposes.

Naval Stores

A firm tone prevailed in Southern and local markets for rosin and turpentine last week. All grades of rosin advanced to new high levels for the current movement and sales of turpentine were reported at a moderate rise. Offerings in the South were generally light in the absence of any increase in receipts. New business was somewhat more active and a steady movement into consuming channels in various industries on contracts was also noted. Estimates of consumption in some fields during the current year are being revised upward, it being contended that scarcity and high cost of other raw materials will increase demand for pine products. The CCC announced that 4,428,420 pounds of gum rosin were made available for lease-lend purposes during the week ended January 3.

CCC Holdings

The following table shows the quantity of rosin and turpentine held by the CCC under loans to producers at the close of business December 31, 1941:—

Crop year.	Rosin.	Turpentine casks.
1938—barrels	189,945	....
drums	....	....
1939—barrels	156,978	....
drums	20	....
1940—barrels	84,047	....
drums	238,802	....
1941—barrels	....	....
drums	130,503	....
Totals	800,295	....

Turpentine.—The local market was firmer, influenced by a stronger situation in the primary center, where offerings continued light. A somewhat better inquiry was noted here.

Savannah, Jan. 9.—Following is a record of the turpentine market for the week:—

	Gallons—Cents.	Gallons—Sales.	Barrels—Receipts.	Barrels—Shipments.	Barrels—On hand.
*Saturday	..	...	...	...	...
Monday	68½	7,550	54	191	6,367
Tuesday	68½	5,850	81	88	5,850
Wednesday	68½	2,800	76	...	†16,803
Thursday	69	300	80	53	16,760
Friday	70	500	18	45	16,733

* No trading. † Includes recounts.

Jacksonville, Jan. 7.—Turpentine stock 5,307 barrels.

London, Jan. 9.—Turpentine, 68s. 6d. per cwt.

Rosin.—There was no broadening of business in the local market last week but demand for small or moderate lots was stimulated to some extent by a further rise in primary quotations.

Savannah, Jan. 9.—Following is a record of the rosin market for the week:—

	Price per unit—Low of range quoted— Sat.*	Mon.	Tues.	Wed.	Thurs.	Fri.
B	...	$3.03	$3.06	$3.07	$3.02	$3.03
D	...	3.03	3.06	3.07	3.05	3.08
E	...	3.10	3.15	3.15	3.11	3.12
F	...	3.07	3.10	3.10	3.10	3.12
G	...	3.02	3.06	3.07	3.08	3.10
H	...	3.00	3.06	3.07	3.08	3.10
I	...	3.03	3.06	3.10	3.08	3.10
K	...	3.11	3.17	3.20	3.20	3.22
M	...	3.20	3.23	3.25	3.26	3.30
N	...	3.22	3.26	3.26	3.26	3.30
WG	...	4.05	4.07	4.07	4.07	4.09
WW	...	4.14	4.15	4.15	4.15	4.18
X	...	4.14	4.15	4.15	4.15	4.18
	Barrels					
Sales	...	344	281	337	243	175
Receipts	...	796	492	210	115	5,387
Shipments	...	756	252	208	...	5,666
Stocks	...	...	...	...	...	34,085

* No trading.

Jacksonville, Jan. 7.—Rosin stock 214,297 barrels.

London, Jan. 9.—Rosin, W.W., 33s. per cwt.

Other Naval Stores

Pine Oil.—Tone firm. Output sold ahead. No spot offerings reported.

Pitch.—Local quotations unchanged. Tone firm. Demand fairly active.

Rosin Oil.—Firmer with raw material. Inquiry increased.

Tar. — Steady contract movement. New business increased. Market firmer.

Driers

Good call for most grades reported. Offerings were restricted slightly but fairly large supplies moved into consumption. Palmitates and stearates were a bit tight. Prices were unchanged.

STEEL DRUMS
WE BUY SELL and Recondition
Acme Steel Drum Company
560 Ferry Street
Newark, N. J.

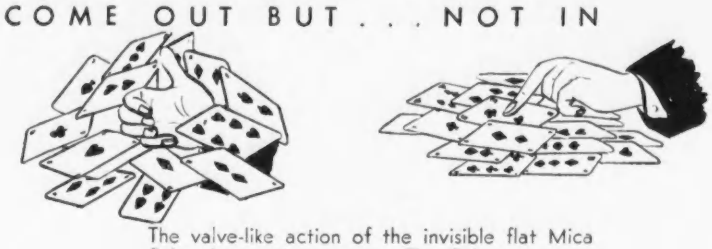
CHROME OXIDE
CHROME
TETRA HYDROXIDE
CHROME GREENS
•
VITRO MFG. CO.
Pittsburgh, Pa.

Shawnee
DRY COLORS
"Color Content Guaranteed"
Chrome Greens
Chrome Yellows
Toluidine Reds
Para Reds Iron Blues
Cadmium Colors
Lake Colors
Ultramarine Blue
KENTUCKY COLOR & CHEMICAL CO.
Incorporated
General Office and Works
LOUISVILLE, KENTUCKY
Offices and Agents In Principal Cities
Distillers of Coal Tar Products

Flat Flake-Like Particles of

WATERGROUND MICA

LET MOISTURE
COME OUT BUT . . . NOT IN



The valve-like action of the invisible flat Mica flakes lets moisture out. The flakes open up like tiny doors. BUT when moisture comes from without, the flat surface painted resists as would cards pressed against a table top

+

Add **GREATER ADHESION**

EVER TRY TO LIFT A SHEET OF GLASS FROM A SMOOTH TOP DESK?

MICA ADDS EXTRA ADHESION BECAUSE ITS FLAKES ARE FLAT

● The flakes lie flat against the surface . . . and against each other . . . in the vehicle. This provides a most unusual adhesion.

MICA REINFORCES FILM, GIVING LONGER LIFE AND MORE FLEXIBILITY

WET GROUND MICA ASSOCIATION, Inc.
420 LEXINGTON AVENUE NEW YORK, N. Y.

PRECISION

The known consistency of our Metallic Stearates is your guarantee of uniform performance.

METALLIC STEARATES OF KNOWN UNIFORMITY

WARWICK Chemical Company

MANUFACTURERS OF CHEMICALS

WEST WARWICK, RHODE ISLAND
580 FIFTH AVE., N. Y. C.
ROCK HILL, S. C.

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IF "ALTERNATE" PRODUCTS Cause ODOR PROBLEMS This May Be The Solution!

If substitute or alternate materials are causing odor problems in your products — there may be a ready, economical solution at Givaudan. It will pay you to investigate.

For years we have been working out "counter-irritants"— compounds which effectively *mask* or *deodorize* offensive odors. These compounds, used in minute quantities, have been found remarkably effective.

Paint, rubber, ink, leather, textile, and other industries have been served by Givaudan in the solution of their odor problems. Write us today— outlining your problem. We will be glad to submit recommendations based on our experience.

GIVAUDAN
DELAWANNA, INC.
Industrial Aromatics Division
330 WEST 42nd STREET, NEW YORK, N. Y.

Dry Colors

Alkali Blue Toner.—Offerings fair. Prices firm.

Bone Blacks.—Few new developments. Demand, offerings and prices at unchanged levels.

Cadium Colors. — Offerings very limited due to scarcity of the metal. Prices unchanged.

Carbon Blacks.—Demand fell off a bit, most consumers having stocked up as much as possible in order to get under the wire before the price rise January 1.

Chrome Colors.—Very tight. Offerings curtailed. Prices firm.

Iron Oxides.—Fair supplies. Prices firm.

Iron Blues.—Market tighter. Offerings limited. Prices firm.

Ochers. — Demand good. Prices firm.

Siennas. — Good movement. No changes in prices reported.

Umbers.—Steady and unchanged.

Vermilion.—Market unchanged. Demand satisfactory.

—Continued on page 111

Current Market Quotations

Yellow, Hansa—Zirconium

—Continued from page 31

Yellow, Hansa, bbls., same basis chrome	lb.	1.37 -	—
primrose shade, bbls., same basis chrome	lb.	1.75 -	—
Mercury oxide, tech., bbls., 1,000 lbs.	lb.	2.87 -	—
smaller lots	lb.	2.89 -	—
Ocher, Amer., golden bbls., works	lb.	.04½-	.06¼
yellow, bbls., works	lb.	.02 -	.02¼
French type, bbls., c.l.	lb.	.0345-	—
l.c.l.	lb.	.0365-	—
French, all shades, cks., c.l., ex dock, Balto., Boston, N. Orleans for import	lb.	.02475	Nom.
New York (f.o.b.)	lb.	.02⅝	Nom.
Philadelphia, for import	lb.	.02⅝	Nom.
San Pedro, San Francisco	lb.	.0290	Nom.
cks., l.c.l., ex dock, Balto, Boston, N. Orleans	lb.	.02575	Nom.
New York	lb.	.02⅝	Nom.
Phila., for import	lb.	.02⅝	Nom.
Portland, Seattle	lb.	.03½	Nom
San Pedro, S. Francisco	lb.	.03	Nom
Yellow, ocher, French, cks., ex whse., Balto., Boston, N. Orleans	lb.	.02725	Nom.
Indianapolis, Kansas City, Milwaukee, St. Louis	lb.	.03⅝	Nom.
New York	lb.	.03	Nom.
Pittsburgh	lb.	.03¼	Nom.
Portland, Seattle	lb.	.03⅝	Nom.
San Pedro, San Francisco	lb.	.03¼	Nom.
f.o.b. N.Y., from dock,	lb.	.02⅞	Nom.
from whse	lb.	.03½	Nom.
Oxide, nat., bbls., c.l., f.o.b. Bethlehem, Easton, N.Y.	lb.	.04½-	—
l.c.l., same basis	lb.	.05 -	—
synth., bbls., c.l., works	lb.	.07 -	—
l.c.l., same basis	lb.	.07¼-	—
Persian orange (see O).			
Zinc, bbls., same basis, chrome CP, contracts	lb.	.17½-	—
open order	lb.	.17½-	—
Navy specifications type, contracts	lb.	.17½-	—
open order	lb.	.17½-	—
Yellow dock root, dom., bls.	lb.	.13 -	.18
Yellow root (xanthoriza), bls.	lb.	.11 -	.13
Yerba santa leaves, bls.	lb.	.10 -	.11
Yohimbine hydrochloride, viz.	oz.	3.00 -	5.75

Z

Zein, bgs., 1,000 lbs. or more, works	lb.	.20 -	—
less than 1,000 lbs., works	lb.	.25 -	—
Zinc,[1,3,5] Metal (see paint market).			
acetate, tech., bbls., dlvd	lb.	.15 -	.16
USP, bbls., 250 lbs	lb.	.27 -	—
kgs., 100 lbs	lb.	.29 -	—
Arsenite, bgs., c.l., dealers, E. of Rockies	lb.	.12 -	—
l.c.l., bgs	lb.	.12½-	—
Zinc arsenite prices are on a frt. alld. basis to dest., in lots of 96 lbs. or over.			
Carbonate, tech., bbls.	lb.	.14 -	.20
USP, precip., powd., bbls.	lb.	.32½-	—
25-lb. dms.	lb.	.37½-	—
kgs.	lb.	.34½-	—
Chloride, tech., fused, dms., c.l., works	100 lbs.	5.00 -	—
l.c.l., works	100 lbs.	5.35 -	—
gran., dms., c.l., works, 100 lbs.		5.75 -	—
l.c.l., dms., works	100 lbs.	6.50 -	—
USP, 100-lb. dms	lb.	.30 -	.31
25-lb. jars	lb.	.36 -	—
solut., 50%, dms., c.l., works, lb.		.0315-	—
l.c.l., works	lb.	.04¼-	.04¼
tanks, works	lb.	.0250-	—
Cyanide, kgs., works	lb.	.33 -	.37
Dust, bbls., c.l., dlvd	lb.	.1035-	—
l.c.l., bbls., f.o.b. works	lb.	.1135-	—
Iodide, N. F., bots	lb.	4.54 -	—
jars	lb.	4.40 -	—
Fluoride, bbls.	lb.	.20 -	.35
Metal (see daily quotations in Market report.)			
Oxide,[2] pigment, dom., Amer. process, coml., lead free, bgs., c.l., dlvd	lb.	.07¼-	—
l.c.l., dlvd	lb.	.07½-	—
bbls., c.l., dlvd	lb.	.07½-	—
l.c.l., dlvd	lb.	.07¾-	—
leaded, 5%, bgs., c.l., dlvd	lb.	.07¼-	—
l.c.l., dlvd	lb.	.07⅝-	—
bbls., c.l., dlvd	lb.	.07⅝-	—
l.c.l., dlvd	lb.	.07⅝-	—
35% or more, bgs., c.l., dlvd	lb.	.06¾-	—
l.c.l., dlvd	lb.	.07 -	—
bbls., c.l., dlvd	lb.	.07 -	—
l.c.l., dlvd	lb.	.07¼-	—
French process, com'l, lead free, bgs., c.l., dlvd	lb.	.07¼-	—
l.c.l., dlvd	lb.	.07½-	—
bbls., c.l., dlvd	lb.	.07½-	—
l.c.l., dlvd	lb.	.07¾-	—
green seal, bgs., c.l., dlvd.	lb.	.09 -	—
l.c.l., dlvd	lb.	.09¼-	—
bbls., c.l., dlvd	lb.	.09½-	—
l.c.l., dlvd	lb.	.09½-	—
red seal, bgs., c.l., dlvd.	lb.	.08½-	—
l.c.l., dlvd	lb.	.08¾-	—
bbls., c.l., dlvd	lb.	.08¾-	—
l.c.l., dlvd	lb.	.09 -	—
white seal, bgs., c.l., dlvd.	lb.	.09½-	—
l.c.l., dlvd	lb.	.09¾-	—
bbls., c.l., dlvd	lb.	.09¾-	—
l.c.l., dlvd	lb.	.10 -	—
imported, gold seal, cks., ex whse	lb.	No prices	
green seal, bbls., ex whse.	lb.	No prices	
white seal, cks., ex whse	lb.	No prices	
USP, c.l., 50-lb., bgs	lb.	.10½-	—
Zinc oxide prices in l.c.l. are ¼c. higher.			
Lead-free and 5% and 35% leaded zinc oxide in car lots are ½c. per lb. higher delivered Pac. Cst., and in less car lots are ½c. per lb. higher ex whse. Pac Cst.; 50% leaded is 5.6c. per lb. higher for car lots delivered Pac. Cst.			
Palmitate, bbls.	lb.	.32 -	.33
Resinate, fused, pale, bbls.	lb.	.10 -	—
precip., dms. dlvd.	lb.	.15 -	—
Stearate, tech., precip., ctns.	lb.	.30 -	.31
USP, bbls.	lb.	.30 -	.31
Sulphate, cryst., bgs., c.l.,	100 lbs.	3.40 -	—
l.c.l.	100 lbs.	4.15 -	—
bbls., c.l.	100 lbs.	3.65 -	—
l.c.l.	100 lbs.	4.40 -	—
flake, bgs., c.l.	100 lbs.	3.80 -	—
l.c.l.	100 lbs.	4.55 -	—
bbls., c.l.	100 lbs.	4.35 -	—
l.c.l.	100 lbs.	4.70 -	—
powd., bgs., c.l.	100 lbs.	5.35 -	—
	100 lbs.	5.35 -	—
l.c.l	100 lbs.	6.10 -	—
bbls., c.l.	100 lbs.	5.60 -	—
l.c.l	100 lbs.	6.35 -	—
Sulphide, bgs., c.l. (20 tons), dlvd.	lb.	.08¼-	—
l.c.l., dlvd	lb.	.08½-	—
bbls., c.l. (20 tons), dlvd.	lb.	.08½-	—
l.c.l., dlvd	lb.	.08¾-	—
barium, pigment, bgs., c.l., dlvd.	lb.	.0560-	—
l.c.l., dlvd	lb.	.0585-	—
calcium pigment, bgs., c.l., dlvd.	lb.	.0560-	—
l.c.l., dlvd	lb.	.0585-	—
magnesium pigment, bgs., c.l., dlvd.	lb.	.05¾-	—
l.c.l., dlvd	lb.	.06 -	—
Car lot prices are ½c. higher delivered Pac. Cst. and less car lot prices are ½c. higher ex whse. Pac. Cst.			
Sulphocarbolate, NF, bbls., dms.	lb.	.24 -	.29
Zinc-ammonia chloride, dms., c.l., works	100 lbs.	5.65 -	—
l.c.l., works	100 lbs.	6.70 -	—
Zinc-iron oxide, pigment, bgs., c.l., dlvd.	lb.	.06 -	—
l.c.l., dlvd., E. of Rockies	lb.	.06¼-	—
dlvd. Pac. cst.	lb.	.06½-	—
ex whse., Pac. cst.	lb.	.07 -	—
Zirconium nitrate, kgs., works	lb.	3.00 -	4.00
Oxide, crude, 70-75%, gr., bbls., works	ton.	75.00 -	100.00
white, 98%, grd., kgs., works,	lb.	1.80 -	2.00

Synthetic Resins

and other

Branded Paint Materials

(Manufacturers' List Prices)

Note:—The list of prices previously printed weekly under the above heading is now printed once a month. The latest printing was in the January 5 issue; the next printing will be in the February 2 issue. Changes in prices—if any—made during the past week are noted in the report on the Paint, Varnish and Lacquer Materials Market which begins on page 105.

THE STORY OUR ADVERTISEMENTS DO NOT TELL

The advertisements of The New Jersey Zinc Company which are appearing currently in these pages explain the reasons why non-defense consumers have not been able to obtain all of the zinc they would like to have.

At the close of a critical business year, however, The New Jersey Zinc Company feels that it should tell a story which would not normally be a part of such a series of advertisements—a story of the cooperation given to this Company by its customers.

This cooperation, and the resulting exchange of vital information, made possible:

A better understanding of our mutual problems and difficulties;

The elimination of unreasonable demands and unfilled promises;

The fulfillment of contract obligations in spite of a tremendous expansion of business;

The shipment of a large list of zinc products where and when they were needed most—in defense and non-defense fields.

Consequently, thanks to our customers' cooperation and understanding, we feel that a difficult task has been accomplished.

The New Jersey Zinc Company looks forward to 1942 with confidence that this cooperation—which has proved of the greatest value under a heavy strain—will continue to operate to the mutual advantage of all concerned.

160 FRONT STREET — New Jersey Zinc Co. — NEW YORK, N. Y.

Oil, Fats, and Waxes

Cottonseed Oil Futures Trading Resumed at 100 Points Advance —Crude Offerings Continue Light—Tallow and Grease Sell at Higher Prices—Perilla Oil Up

Miscellaneous vegetable, animal and fish oils, fats and greases continued quiet last week. Trading in refined cottonseed oil futures was resumed at a sharp advance, but there was still much uncertainty and confusion in other branches of the oils and fats market concerning the new price ceiling order, as well as the 90-day inventory regulation, and in such circumstances sellers were disposed in many cases to remain aloof pending a further clarification of these orders. Offerings of various products were still conspicuous by their complete absence, this applying to both spot supplies and futures. Sales of tallow and grease were reported at an advance and higher prices were quoted for perilla soybean and corn oils as well as some of the fatty acids. The trend of lard futures was upward at times although the movement of hogs to Western markets was surprisingly large in view of the severe Winter weather over a wide area. Chinawood oil was placed under strict priority control.

Vegetable Oils

Castor, Dehydrated. — Demand active. Raw material tending upward. Oil quotations maintained. Market firm.

Chinawood.—Many inquiries noted here. Offerings still lacking. Market nominal. Placed under strict priority control, effective until February 15. Reported government planning the purchase of all existing supplies and all future imports.

Coconut. — Quiet and nominal throughout week. Regular sources unable to offer. Resale oil scarce.

Corn.—Crude reported sold in the West at 12¾c. per pound, tankcars. Refined nominal.

Cottonseed. — Fair movement of moderate lots of edible oil. Quotations maintained. Tone firm.

Oiticica. — Offerings lacking, spot and futures. Many inquiries.

Olive. — Edible oil in light supply and firm. Denatured advanced 40c. per gal. Nominal foots prices up 1c.

Peanut.—Crude reported sold early in week at 13c. per pound, tankcars.

Perilla.—Spot stocks light. Quotations advanced about 2c. per pound. Fair inquiry.

Rapeseed.—Market nominal in absence of offerings, spot and futures.

Soybean.—Crude quoted 11¼c. to 11¾c. per pound, Western mill basis; sales reported at inside figure. Cash beans generally firm.

There was no trading in soybean oil futures on the New York Produce Exchange from January 3 to January 9, inclusive. Following is a price record for the week:—

	Cents per pound in tanks— High.	Low.	Close.
May	....	....	11.60 bid
July	....	....	11.60 bid

Price Changes

Advanced

Capric acid, 1¾c. per lb.
Castor oil fatty acid, ¾c. per lb.
Coconut oil fatty acid, 1¾c. per lb.
Corn oil, ½c. to ¾c. per lb.
Degras, 1½c. to 3c. per lb.
Grease, ½c. per lb.
Lard, 25c. to 50c. per 100 lbs.
Lauric acid, 1¼c. per lb.
Linseed meal, 50c. per ton.
Linseed oil fatty acid, 2¼c. per lb.
Olive oil, denatured, 40c. per gal.
Olive oil foots, 1c. per gal.
Perilla oil, 2¼c. per lb.
Soybean oil, ¼c. to ½c. per lb.
Soybean oil fatty acid, 2c. per lb.
Tallow, ½c. per lb.

Reduced

None

Comparative Values

Index numbers compiled from twenty-three typical oils, fats and greases on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
180.2	**177.6**	**176.2**	**103.6**

Market news that may have developed after this report was sent to press will be found on page 4.

Markets at Other Centers

Chicago—Jan. 9

Vegetable oil quiet.

Coconut.—Refined, edible oil, 15c. to 15¼c. per pound, drums, car lots; and 15½c. to 15¾c., drums, less than car lots.

Corn.—Refined, edible oil, 15c. to 15½c. per pound, drums, car lots; 15½c. to 16c., drums, less than car lots.

Peanut.—Crude, South, 13c. per pound.

Soybean.—Crude, January-forward, 11c. to 11¼c. per pound.

The market for soybeans on the Chicago Board of Trade was quiet. Following is a soybean price record, per bushel, for the week:—

	High.	Low.	Closing— Jan. 9.	Jan. 2.
Cash, No. 2.	$1.78¾	$1.78½	....	....
May	1.84⅝	1.79½	$1.83¾	$1.83¼
July	1.86⅞	1.81⅝	1.85⅝	1.84⅝

San Francisco—Jan. 7

Vegetable oils continued jammed by ceiling and supply restrictions and trading very narrow. Moderate transactions in domestic materials such as cottonseed, soybean and peanut oils.

Cottonseed, Crude.—Quoted 12½c. per pound, tank cars, f.o.b. mills, Coast. Bleachable 14c.

Soybean, Crude. — Quoted 12c. per pound, tankcars, Coast.

Copra. — No offerings. Some effort made to work out imports of dutiable South Seas copra.

Linseed Oil

Flaxseed price changes moderate. Linseed oil steady. Meal advanced.

Flaxseed.—Duluth, Jan. 9.—Flaxseed quiet. Shipments to Minnesota about the only movement. Believed little remains to come forward.

The week's closing flaxseed price range was as follows:—

	Cash.	May.
Saturday	$2.13½	$2.10½
Monday	2.08¼	2.06¼
Tuesday	2.10	2.07
Wednesday	2.11¼	2.08½
Thursday	2.10	2.07
Friday	2.09¼	2.06½

Crop movement in bushels follows:—

	Receipts— 1942.	1941.	Shipments— 1942.	1941.
This week	90	77,183	35,585	1,628
Since Aug. 1..	2,961,869	5,058,385	2,670,060	4,751,405

Minneapolis, Jan. 9.—Competitive demand for cash flaxseed continues. Actual offerings light because part of receipts consist of Canadian seed coming from Duluth. Farm movement light owing to severe weather. A reported maritime commission cut in Argentina freight rates from $22 to $18 per ton lacked confirmation. This report caused temporary drop in futures.

The week's closing flaxseed price range was as follows:—

	Cash.	May.	July.
Saturday	$2.15½	$2.10½	$2.12
Monday	2.12¼	2.06¼	2.08¼
Tuesday	2.13	2.07	2.08⅜
Wednesday	2.14¼	2.08¼	2.10½
Thursday	2.14	2.07	2.09
Friday	2.13½	2.06½	2.08½

Crop movement in bushels follows:—

	Receipts— 1942.	1941.	Shipments— 1942.	1941.
This week	172,200	105,000	77,000	28,000
Since Sept. 1..	7,362,400	7,766,200	821,400	400,300

Winnipeg, Jan. 9.—The week's closing flaxseed price range was as follows:—

	Cash.	May.	July.
Saturday	$1.58¾	$1.61¼	$1.60¾
Monday	1.57½	1.60	1.59¾
Tuesday	1.58½	1.61	1.60⅜
Wednesday	1.57¼	1.59⅝	1.59½
Thursday	1.56½	1.56½	1.59
Friday	1.56¼	1.58¾	1.58½

Buenos Aires, Jan. 9.—Flaxseed, $1.08¾ per bushel. Exports this week 272,000 bushels, including 248,000 to the United States. Total since January 1 as follows:—

To—	Bushels— This year.	Last year.
United States	248,000	268,000
United Kingdom	24,000	.....
Continent	.....	4,000
Orders	.....	.....
Others	.....	43,000
Totals	272,000	315,000

Visible Supply

	Bushels.
Last week	28,346,000
Previous week	27,953,000
Last year	4,331,000

Hull, Jan. 9. — Flaxseed, La Plata, £13⅝ per long ton; Calcutta £20¾.

Linseed Oil.—The local market was steady, tankcar quotations being maintained at 10.2c. to 10.4c. per pound. Inquiries were more numerous but actual business was apparently limited to comparatively small lots owing to

Oils in 1942

Despite the sharp falling off in business in the local market for fats and oils during the closing weeks of last year and the first week of the new year, as a result of ceiling prices and other government regulations, the indications seem to point to a very large movement of many products to consumers in various industries during 1942. In view of the war in the Pacific, much uncertainty prevails concerning future supplies of Far Eastern products, but the opinion exists in some quarters that new sources of supply or satisfactory substitutes will be found for some of the oils cut off by the war. In an official report from Washington it is stated that supplies of fats and oils from domestic production, stocks and probable imports will be sufficient to maintain consumption and exports in 1942 at the 1941 level, even if imports of oilseeds and oils from the Pacific are completely cut off, although it is added that in such circumstances stocks of primary fats and oils would be reduced considerably during 1942.

Current prices on animal, vegetable, and fish oils (under Oil), fats and greases (under Grease) are given in the alphabetical list of prices beginning on page 9

STEARIC ACID
Single Pressed and Double Pressed
Available in either cake or flake form
Triple Pressed
IVORY BRAND

RED OIL
(OLEIC ACID)
RUBY OLEINE BRAND *(distilled)*
STAR BRAND
(saponified)
CANARY BRAND
(very pale yellow, especially suitable for best types of dry cleaners' soaps.)
PROCTER & GAMBLE
MAIN OFFICES
Gwynne Bldg., Cincinnati, Ohio
220 East 42nd St., New York City
Branches and stocks in all large cities

Stearic Acid Oleic Acid Fatty Acids
(RED OIL)
A. GROSS & CO., 295 Madison Avenue, New York, N. Y.
ESTABLISHED 1837 FACTORY: NEWARK, N. J.
ASHLAND 4-8251 CABLE: GROSSRAY

W. C. HARDESTY CO., Inc.
41 East 42nd Street New York
RED OIL STEARIC ACID
Saponified - Distilled
HYDROGENATED FATTY ACIDS (HYDREX)
Cottonseed Oil Fatty Acids Coconut Oil Fatty Acids
Palm Oil Fatty Acids Corn Oil Fatty Acids
Lauric Acid Specialty Fatty Acids
Glycerine - Pitch - White Oleine
FACTORIES: Dover, Ohio - Los Angeles, Calif. - Toronto, Canada
CALIFORNIA OFFICE: 5636 East 61st Street, Los Angeles
Cable Address: "EPILOGUE"

EMERY
America's largest producers of
STEARIC and OLEIC ACIDS
All Grades Saponified and Distilled
FATTY ACIDS • GLYCERINE • PITCH
SPECIAL FATTY ACID DERIVATIVES
Since 1840
EMERY INDUSTRIES, INC.
Originators of Twitchell Process
New York CINCINNATI, OHIO Lowell, Mass.
Stocks in All Principal Cities

the recent government 90-day inventory order. There was a steady movement, however, of oil to consumers and dealers on contracts. Advices from outside points stated that mills were operating at top speed to fill contract withdrawals. Receipts of flaxseed in Northwestern markets were light, while demand continued good. Reports of a cut in ocean freight rates on shipments of flaxseed from Argentina lacked confirmation.

Minneapolis, Jan. 9.—Linseed oil consumers are eager to resume buying but crushers have to watch their step because of the numerous regulations from Washington. The 90-day order on inventories is the most bothersome. Shipping instructions continue excellent and mills are operating at top speed. Tankcars, 10.4c. per pound; cooperage, car lots, 11.3c.; warehouse lots, 11.7c.

Shipments of oil in pounds were as follows:—

	1942.	1941.
This week	4,420,000	2,950,000
Since Sept. 1	81,670,000	65,200,000

San Francisco, Jan. 7.—Moderate movement of linseed oil for delivery in early positions. More interest in drum lots than tankcars. Ruling prices: Tankcars, 10.3c. per pound; drum lots ex-mill, 11.2c.; drum lots ex-warehouse, 11.6c.

Chicago, Jan. 9.—Linseed oil quiet. Tankcar, 10.2c. per pound; drums, car lots, 11.1c.; drums, less than car lots, 11.5c.

London, Jan. 5.—Linseed oil, 41s. 6d. per cwt.

Linseed Meal.—The market here was firm at an advance of 50c. per ton. Demand active.

Minneapolis, Jan. 9.—Linseed meal active. January output sold. Crushers worried over outlook for burlap bags. Quoted, $39.50 to $40 per ton, car lots.

Shipments of meal in pounds were as follows:—

	1942.	1941.
This week	14,920,000	10,080,000
Since Sept. 1	192,400,000	147,994,000

Chicago, Jan. 9.—Linseed meal movement rather moderate. Round lots, $40 per ton, nominal; car lots, $40 to $40.50; less than car lots, $42 to $42.50.

Cottonseed Oil

Refined cottonseed oil futures sharply higher. Trading quiet. Southern markets for cottonseed products firm.

Cottonseed Oil.—Trading in refined cottonseed oil futures was resumed in the local market on January 3. Prices advanced about 100 points, the limit permitted for one day. Under a revised ruling on ceiling prices, bid quotations at the close of the market on October 1 were fixed as the maximum. During the remainder of last week trading was quiet and fluctuations were narrow, but the tone of the market remained firm.

Trade interests were credited with purchases of May and July. Commission houses were on both sides of the market in a small way. Offerings of contracts were light much of the time. The open interest in the market on January 6 was 1,417 contracts. On Tuesday six tenders were reported on January contracts. January was switched to May at 3 to 5 points difference and to July at 5 points. March was switched to May at 2 points difference and May was switched to July at 3 points.

Crude oil offerings continued light. There were reports of sales in the Southeast at 12½c. per pound. The trend of lard and soybean futures was upward at times. Sales of crude soybean and corn oils were reported at higher prices. There was still an absence of offerings of many vegetable oils as much uncertainty continued to prevail concerning the new price ceiling schedule and the 90-day inventory regulation. An improvement was reported in demand for cash refined cottonseed oil. The government announced the purchase of 13,934,000 pounds of lard and 5,750,000 pounds of soybeans during the week ended January 3.

Stocks of lard in Chicago decreased 7,197,719 pounds during December against an increase of 20,016,178 pounds in the same month last year. At the close of December stocks in that market were 111,953,101 pounds against 185,821,199 pounds a year ago. Severe winter weather was reported in the West but receipts of live hogs in the principal markets for four days of the week aggregated 425,000 head against 344,200 head in the same time last year. Importations were reported at New York last week of 1,041 tons of coconut oil and 3,132 tons of palm oil.

Trading in bleachable prime Summer yellow cottonseed oil futures on the New York Produce Exchange from January 3 to January 9, inclusive, comprised 623 contracts. Following is a price record for the week:—

	Cents per pound in tanks— High.	Low.	Close.
January	13.83	13.62	13.82 sale
March	13.86	13.53	13.82 sale
May	13.83	13.57	13.82 sale
July	13.83	13.57	13.80 sale

Crude, Southeast, 12½c. nom.

Chicago, Jan. 9.—Cottonseed oil quiet. Refined, edibleoil, 15½c. to 16c. per pound, drums, car lots; 16c. to 16½c., drums, less than car lots.

Hull, Jan. 9.—Cottonseed oil, refined, 36s. 6d. per cwt.; crude, Egyptian, 31s. 1½d.

Cake and Meal.—A firm tone continued to prevail in Southern markets. An increased movement of meal reported.

Markets at Other Centers

Atlanta—Jan. 7

Producers of prime crude cottonseed oil are holding at 12⅜c. per pound, the official government imposed limit. Meal, 8 percent, $42.50 to $43 per ton. Peanut meal quoted around $43 per ton in southern Georgia and $42.50 in south Alabama.

Memphis—Jan. 8

Some trading in crude cottonseed oil at limit of 12⅜c., Valley basis. Most buyers unable to purchase on account of 90-day stock order. Meal, 41 percent, $39.50 to $40 per ton, Memphis basis. Bulk cake $35.50 to $36 per ton, Mississippi points. Hulls $5.50 to $6 per ton, mill points. Weather clear and very cold. Five above zero today. Closing cottonseed and soybean meal quotations on Memphis exchange as follows:—

	Dec. 31.	Jan. 8.
January	$38.35@38.70	$38.75@39.25
March	39.50@—	39.75@40.00
May	39.50@39.90	39.75@39.90
July	39.75@40.00	39.90@40.25

Closing soybean meal futures:—

January	$39.55@40.00	$40.50@—
March	38.65@38.95	39.40@—
May	38.60@—	39.40@39.55
July	38.50@38.80	39.15@39.50

Fish Oils

Cod.—Primary situation firm. Offerings light. Local market steady.

Sardine.—Local refined prices steady. Fair small-lot inquiry.

Whale.—Refined quotations stationary. Tone firm. Trade quiet.

Markets at Other Centers

Baltimore—Jan. 7

Distributors of menhaden oil point out that the revised ceiling price order fails to make it any more certain what the maximum price should be than the original draft. While it specifies that the ceiling is to be the price realized on October 1, the fact is that sales were made on that date at different prices. Meanwhile business is at a standstill because of the prevailing uncertainty.

DISTILLED
FATTY ACIDS
Tallow Fatty Acids
Cocoanut Fatty Acids
Cottonseed Fatty Acids
HYDROGENATED FATTY ACIDS
(Rufat 52)
STEARIC ACID
RED OIL
(Oleic Acid)
WILSON & CO. INC.
WILSON-MARTIN DIV.
SNYDER AND SWANSON ST.
PHILADELPHIA, PA.

CHINA WOOD OIL
WAH CHANG TRADING CORPORATION
Woolworth Building
New York, N. Y.
SPOT FUTURE

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MEMPHIS, TENNESSEE
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New York Produce Exchange (Futures in Cottonseed Oil)
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ACIDLESS TALLOW OIL
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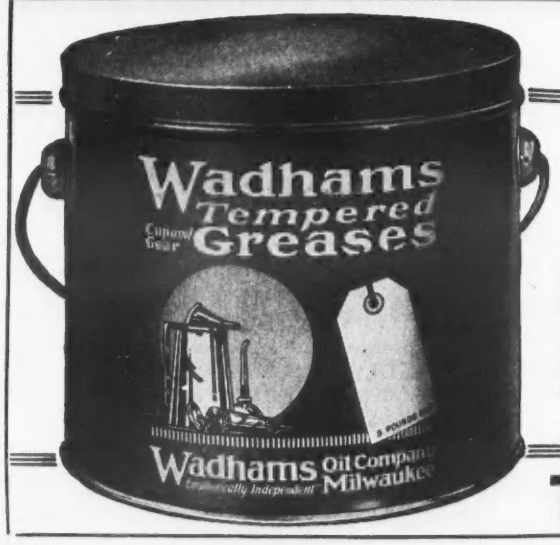

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THE HEEKIN CAN CO., Cincinnati, O.

Fishing off the North Carolina coast has stopped.

San Francisco—Jan. 7

Price ceilings, inventory rulings and an almost complete lack of fishing contributed to the general confusion and uncertainty in the Pacific Coast fish oils markets last week. One quarter reported sale of a tank car at 61c. per gallon for crude. The California Sardine Products Institute reported that for the week ended January 2, not a single ton of raw sardines was turned in to the processing plants. Fishing boats may now resume operations.

Fatty Acids

Capric Acid.—Quotations advanced 1¾c. Demand more active.

Coconut Oil.—Raw material in light supply. Acid quotations advanced 1c.

Red Oil.—Raw material firmer. Output moving steadily on contracts and new orders.

Stearic Acid.—Business fairly active. Basic material stronger. Acid market firm.

Chicago—Jan. 9

Good demand for fatty acids. Offerings limited. Corn oil, double distilled, 14¾c. to 15c. per pound, tankcar; 15¼c. to 15½c., drums, car lots; 15¾c. to 16c., drums, less than car lots; coconut oil, acidulated, 16½c. to 16¾c., tankcar; 17c. to 17¾c., drums, car lots; 17½c. to 17¾c., drums, less than car lots; cottonseed oil, double distilled, 14c. to 14¼c. per pound, tankcar; 14½c. to 14¾c., drums, car lots; 15c. to 15¼c., drums, less than car lots; settled cottonseed soap stock, 60-62 percent basis, 3¾c. to 4c.; boiled down soap stock, 65 percent basis, 4¾c. to 5c.; cottonseed foots, 50 percent basis, 3¾c. to 4c.

Fats and Greases

Grease.—Fair demand for moderate lots on spot. Market firm at ¼c. to ½c. advacne.

Chicago, Jan. 9.—Choice white grease, 9c. to 9¼c. per pound.

Lard.—Local cash market firmer with futures. Inquiry somewhat better. Government purchased 13,934,000 pounds during week ended January 3.

Chicago, Jan. 9.—Following is a lard price record, per 100 pounds, for the week:—

	High.	Low.	Closing Jan. 9.	Closing Jan. 2.
Cash	$10.65	$10.45	$10.65	$10.57
May	12.32	12.02	12.27	12.17
July	12.52	12.30	12.50	12.42

Stearin.—Spot trade fair. Stocks reported moderate. Market steady.

Tallow.—Fair inquiry for moderate lots. Sales at ½c. advance. Offerings light.

Chicago, Jan. 9.—Inedible tallow, prime, 9c. to 9¼c. per pound.

Animal Oils

Degras. — Offerings light. Quotations nominal. Crude material firm.

Lard.—Quotations stationary. Market firm. Fair small-lot trade.

Chicago, Jan. 9.—No. 1 lard oil, 13¾c. to 14c. per pound.

Neatsfoot.—Fair spot demand. Raw material in light supply. Oil market firm.

Oleo.—Local market firm. Spot stocks moderate. Fair demand.

Chicago, Jan. 9.—Extra oleo oil, 12¾c. to 13c. per pound.

Tallow.—Trade routine. Raw material firmer. Oil unchanged.

Waxes

Bees.—The Office of Price Administration will shortly meet with sellers and processors of beeswax at which time the whole set-up resulting from the OPA recent price freezing request will be canvassed. Bleachers are particularly concerned about the price at which white bleached wax was frozen. The OPA removes "American crude" from its request, substituting African crude.

Candelilla.—Firm and moving well at frozen prices.

Carnauba.—Trade to discuss present frozen prices with OPA at early date. Market firm. Active.

Japan.—Sellers with stocks show reserve. Little available under 35c. per pound.

Resale Market

The resale market remained quiet and developments of interest were lacking. Although coconut oil was not available in regular channels, there was an absence of offerings from second hands as holders of the small supplies supposedly in existence were disposed to await events.

Paint Materials

—*Continued from page* 108

Lacquer Materials

A broad buying movement for defense purposes characterized business in the market for lacquer materials and solvents last week. The general position of the market continued tight, and offerings to civilian channels were limited. One seller raised prices for diacetone alcohol, butyl lactate and dibutyl ether to conform with higher raw material costs. Various grades of film scrap were sharply advanced. A wide range of prices prevailed for such materials as acetone, butyl acetate, butyl alcohol, and ethyl acetate.

Acetone.—Prices range from 7c. to 15.8c. per pound in tanks. Demand active.

Alcohol, Butyl.—Buying broad. Quotations in tanks range from 12½c. to 15.8c. per pound for normal material.

Alcohol, Diacetone. — One seller raised prices of technical to basis of 12½c. for tanks; acetone-free, tanks, 13½c. per pound. Supplies tight.

Butyl Lactate.—A leading manufacturer advanced prices 3c. to the level of 26½c. per pound for drums, less car lots.

Dibutyl Ether.—One seller increased quotations for less car lots 2c. at 30c. per pound.

Film Scrap.—Prices 2c. higher making water-white 16c. to 17c. per pound, according to quantity; light, 15c. to 16c. per pound and dark colors, 14c. to 15c. per pound.

Tricresyl Phosphate. — Prices unchanged and firm. Defense needs absorb bulk of output.

Glues and Binders

Casein.—Market maintained at previous level, with unchanged prices for both the domestic and Argentine material.

Glues.—Heavy demand. Offerings curtailed. Prices nominal.

Resale Markets

Developments in the resale market for paint, varnish and lacquer materials were few during the week under review. Offerings of paint raw materials were not substantial and transactions in lacquer materials were lacking. In the absence of any increase in offerings of resale pine oil quotations were nominal at $1 or higher per gallon.

- - -—V- - -—

Washington Talks It Over

—*Continued from page* 5

uct, and his usefulness in his industry. Even these "hardship allocations" are expected to be on a temporary basis.

Tire Care

Stored automobile tires should be coated with a synthetic rubber paint to protect them from deterioration, the army says in a textbook on tire care published for its motor transport corps. Apparently the care of tires is a military secret, for distribution of the book is restricted to military personnel, but the army generously released a few tips for other tire hoarders.

If civilians find synthetic rubber paint as hard to get as tires themselves, the army suggests wrapping tires with anything that will keep out oxygen.

Tea for Two Americas

South American processors of yerba mate, sometimes called Paraguay tea, are hoping to crash the North American beverage market now that shipments of tea from the Orient are subject to the hazards of war. Our administration hopes they can make the grade as a step in hemispherical solidarity. The stuff is brewed like tea, tastes a lot like it, and gives much the same "lift," but los Norde Americanos have never taken to it.

Enterprising Brazilians are now out to capture the U. S. market with a double-toasting process which gives the brewed mate a brown instead of green color and makes the flavor more nearly approximate ordinary tea. They have also changed the spelling to matte in the hope of getting the proper pronunciation, and are trying to promote the stuff as a soft-drink ingredient. The leaves have an average caffeine content of about 1 percent.

Ore Miners Want Prices Up

Potential domestic producers of manganese and chrome ore are not at all satisfied with the "concessions" made to them last month by the Metals Reserve Company in offering to buy low-grade ores with high tolerances, or none at all, for various impurities. They say the prices are still far too low to permit production, and that in refusing to subsidize domestic producers, Jesse Jones is being penny-wise and pound-foolish and is endangering defense in a way which will be a national scandal as soon as Western senators can get around to an investigation.

MRC's present price scale for manganese is $36 per long ton for 28 percent grade; $28.60 for 44 percent; and $22 for 40 percent. For chrome ore the prices are $40.50 per long ton for 45 percent grade; $28 for 40 percent with few impurities, and $24 for 40 percent with no limit on impurities. Western miners say prices must go a lot higher to bring any substantial production. There are those who say these low-grade, impure, ores are of little use at any price.

Smell of the Amazon

Among the score or more vegetable oils which Brazil is trying to develop for the export market is linaloe oil, also called bois de rose, which has a penetrating aroma very useful in the perfume industry now that customary sources of essential oils are cut off. Encouraged by the possibilities of developing a permanent clientele in the U. S., the Brazilian Ministry of Agriculture is providing technical and financial assistance for more extensive production of the oil.

Whalers' Whereabouts

The whaling industry can now be counted among the war casualties. American whalers were forced out of business shortly before the war began by U. S. import restrictions, and the German, Norwegian, and British whaling fleets have done very little, if any, business since the war started because of enemy raiders and use of the ships for war purposes.

This gave the Japs the run of the Antarctic. Since they don't abide by the whale conservation treaties, and need all kinds of oil badly, the presumption is they made quite a haul last year. Now they, too, must have suspended operations, for if the Jap whaling fleet is in the South Pacific it's a safe bet that warships of the United Nations are out after them.

A better guess is that the Japs, having planned this war for some time and quite thoroughly, are using these vessels for other purposes. The fast killer boats are useful naval auxiliaries, particularly as subchasers, and there are tales that Jap factory ships are built so they not only can hoist whales up their stern chutes, but also the two-man submarines, such as were used at Pearl Harbor.

Immigrant Insecticide

The Department of Agriculture is hoping to interest farmers in Mexico and the southwestern United States in the possibilities of raising the Argentine tree-tobacco plant as a source of anabasine, an insecticide similar to nicotine but said to be four or five times as effective against certain types of insects.

Defrosted Alien Assets

Strategic materials, machinery, and other useful articles owned in this country by Axis governments, their nationals, and persons under their control, are being ferreted out by the Treasury Department and made available to OPM under its requisitioning power. Already an inventory of $200,000,000 has been located and more is being hunted.

The stuff was "frozen" in this country by operation of export licenses, foreign funds control, and the blacklist, and for six months the Treasury has been taking an intensive census of foreign-owned assets here. Some of the stuff had been deliberately bought up to keep it away from the Allies, and other shipments were on their way to bona fide business men when their countries were invaded, but it is all being "defrosted" and put to use.

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Wax Trade Price Protests To Get OPA Hearing

A meeting at which wax importers and processors may present questions and make comments about the prices at which the Office of Price Administration recently froze quotations on carnauba, bees, candelilla, and ouricury waxes will be held shortly in Washington. Notice of the meeting date is expected daily.

Sellers and processors of the waxes in question have been squirming under what they feel to be the economic unreasonableness of the December 24 request of Price Administrator Henderson. Some in the wax trade have already journeyed to Washington and filed what amounted to protests.

The burden of most complaints, protests, and comments heard here has been that the Henderson prices were too low to be followed without actual money loss to sellers thereat. The protested prices are:—

Carnauba, bees, candelilla, and ouricury waxes at specified price levels, which were:—Carnauba, No. 1 yellow, 88c. per pound; No. 2 yellow, 87c.; No. 3 yellow, 85c.; No. 2 North Country, 84c.; No. 3 North Country, 79c.; No. 3 chalky, 78c. And on Brazilian or Chilean crude beeswax at 50c.; African crude, 49c.; white bleached beeswax, 56c. And on candelilla wax at 33c., and ouricury wax at 55c.

- - -—V- - -—

N.Y. Produce Exchange Club Bridge January 14

New York Produce Exchange Luncheon Club will hold a duplicate bridge tournament January 14. Tickets $10 per pair, including dinner which will be served at 6 p.m. Tournament at 8 p.m. Many prizes will be awarded. Proceeds go to the U. S. O.

- - -—V- - -—

Callahan Zinc-Lead Company has elected Joseph T. Hall executive vice-president and E. A. Salo, treasurer.

E. A. BROMUMD COMPANY

—o—

Beeswax
Carnauba Wax
Ceresine Wax
Ozokerite Wax

—o—

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FINE and INDUSTRIAL
CHEMICALS

Drugs, Fine Chemicals

OPM Issues Distribution Control Orders on Molasses, Ethyl Alcohol, and Methanol — Spot Quicksilver Lower —Menthol Reduced—Mercurials Strong

Strength that tended to expand and increase as the national determination for victory brings the whole industrial machine into line with total and all-out devotion to the war was the dominant characteristic of the drug and fine chemical market last week. Production is being turned into channels leading solely to the creation of the most effective war machine, and even now there appears to be a ready buyer for almost every pound of material produced.

The Office of Production Management curtailed sales of ethyl alcohol to the perfume and cosmetic industries. The OPM order was drastic and a total change of formulas will probably be forced on many smaller manufacturing consumers. The OPM also decreed that no more methanol may be used to manufacture anti-freeze compounds. Also, it curtailed sharply the amount of blackstrap molasses to be delivered to four specified classes of users. Sixty percent of whiskey distilleries' capacity must be diverted to alcohol production, per OPM order.

The situation in mercurials showed signs of becoming acute. Higher prices should have been named a long time ago, according to some. The Office of Price Administration opposes such a warranted act by the mercurials manufacturers, but it also continued to leave the quicksilver market totally without stabilization price control so far as the mines are concerned. Voluntary price stabilization was supposed to have been achieved last September. However, the price agreed on has been breeched more than it has been observed, according to many.

Price Changes

Advanced

None

Reduced

Menthol, 25c. per lb.
Quicksilver, spot, $4 per flask.

Comparative Values

Index numbers compiled from thirty-five typical drugs and fine chemicals on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
241.3	242.2	239.0	205.9

Market news that may have developed after this report was sent to press will be found on page 4.

Acetone.—Prices are all over the lot, on and under the OPA price ceiling. Minimum quotations are 7c. per pound in tanks.

Acid, Acetic.—Natural, U.S.P. glacial, $11.70 per 100 pounds, f.o.b. sellers' shipping point. Synthetic item priced under ceiling, but now on works basis.

Acid, Benzoic.—Strong. Demand pressed production stoutly.

Acid, Boric.—Needs for first six months now well covered. Activity now at high level, but strictly routine.

Acid, Citric.—Manufacturers operating from molasses are limited to a thirty-day supply, less any quantity in excess of a fifteen-day supply on hand. Office of Production Management order.

Acid, Tartaric.—Nothing new or startling. Routine strong, and not overstocked market meets excellent demand.

Alcohol.—Office of Production Management curtails alcohol deliveries to perfume and cosmetic trades. Percentage permitted based on deliveries during the corresponding month in the twelve months period ended June 30, 1941. The percentage for January, 1942, was set at 85 percent, and it is reduced to 70 percent for each month thereafter. Readjustment of formulas will often be necessary that consumers comply with order. Statistics comparing production, withdrawals, and stocks of pure and denatured ethyl alcohol in July-November of 1941 and 1940, as reported by the Alcohol Tax Unit, Bureau of Internal Revenue, Treasury Department, Washington, are as follows:—

Ethyl Alcohol

	Proof gallons— 1941. July-Nov.	1940. July-Nov.
Production	177,010,345	115,052,581
Withdrawn—		
Tax paid	14,403,690	10,807,393
Tax free	163,321,331	115,395,945
Stocks, Nov. 30	8,037,966	10,018,410

Denatured Alcohol

	Wine gallons— 1941. July-Nov.	1940. July-Nov.
Completely		
Produced	12,111,374	12,870,631
Removed	12,409,358	12,843,048
Stocks, Nov. 30	137,197	516,516
Specially		
Produced	70,252,810	51,028,061
Removed	70,267,776	51,099,619
Stocks, Nov. 30	586,355	1,069,005

Bonded Dealers

	Wine gallons— 1941. July-Nov.	1940. July-Nov.
Specially denatured—		
Received from denaturing plants	1,883,095	1,529,048
Disposed to bonded manufacturers	2,037,884	1,612,155
Inter-dealer shipments	17,680	16,660
Stocks, Nov. 30	184,626	296,551

Amyl Acetate.—Some quote technical at 14½c. per pound in tanks.

Brucine.—Plenty of demand. Little

Coca and Cocaine

Coca, Divine Plant of the Incas, has a dual place in American industry. The larger part of imports go to make a non-narcotic flavoring extract. The balance is used to produce cocaine. Peru is the principal primary market and the Netherlands East Indies one of secondary importance.

Total imports in 1940 were 774,840 pounds, of which quantity 453,224 pounds were earmarked for extract production, and 321,616 pounds were available for cocaine manufacture.

Cocaine production was 1,808.4 pounds in 1940. The stock of cocaine in hand on January 1, 1940, had been 360.8 pounds. On December 31, 1940, it was 602.8 pounds.

The stock of coca leaves December 31, 1940, was 809,195 pounds. All industry had consumed 774,840 pounds in 1940. The year's total of imports and the imports released to consumers were identical. All data derive from a report of the Bureau of Narcotics, U. S. Treasury Department.

The price for cocaine when the war began in September, 1939, was $9.75 per ounce. It is still so quoted. This stability is in violent contrast to price activity in World War No. 1.

The market was $2.60 per ounce when it began. It was $5.50 when the United States went in, and had reached $11.25 per ounce at the Armistice of November 11, 1918. Subsequently, the price never approached pre-war levels.

Current prices on drugs and fine chemicals are given in the alphabetical list of prices beginning on page 9

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Also other grades—Stocks in principal cities
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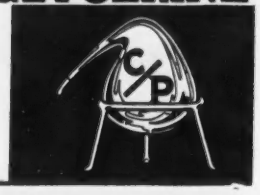

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ALPHA LACTOSE POWDERED-GRANULAR
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LACTIC ACID
POTASSIUM PERSULPHATE
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ATLAS
MANNITOL
Viscosity Control of Oil Modified Resins
ARLEX
(Atlas Commercial Sorbitol Solution)
Softener and Conditioner
Arlex—Reg. U. S. Pat. Off.
CHEMICALS ATLAS EXPLOSIVES
ATLAS POWDER COMPANY
Industrial Chemicals Dept. Wilmington, Delaware

VINYL ACETATE
(STABILIZED)
Boiling Range:— 71.8° C. to 73° C.
Containers:— Non-returnable 55-gal. drums, 410 lbs. net weight.
Uses:— Preparation of poly-vinyl acetate, alcohol, and acetal resins.
Preparation of sulfa-type pharmaceuticals.
The vinyl group is very reactive in all halogen and halogen acid reactions, and addition reactions with other unsaturated or polymerizable materials as ethylene, amylene, coumarone, and turpentine.
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material available for prompt delivery.

Butyl Alcohol.—Offered in some quarters at 12½c. per pound, tanks.

Butyl Acetate.—Priced at 13½c. per pound, tanks, in some quarters.

Butyl Lactate.—Market is 23c. per pound, tanks, with some sellers.

Butyl Stearate.—Less car lots noted at 31c. per pound.

Cadmium.—Heavy drain on production. Price stabilization continues by agreement.

Caffeine.—Concern felt regarding ability of producers to keep raw material flowing to the spot from Far East.

Camphor.—Natural on spot practically nominal. Users must depend on production of domestic synthetic. Much larger production needed.

Castor Oil.—Agents for Brazilian shippers report little buying. Market gossip talked of sales at $81 per long ton. Unconfirmed. Oil definitely firm and active.

Chicago, Jan. 8.—Castor oil prices are:—Cold pressed, U.S.P., returnable drums, car lots, 13¼c. per pound; drums, less than car lots, 14c.; tanks, 12⅜c.; No. 3, extracted, returnable drums, car lots, 13c.; drums, less than car lots, 13¾c.; tanks, 12½c.

Cocaine.—Still stabilized at $9.75 per ounce. War may require larger production.

Cocoa Butter.—Sturdy and firm under the OPA price ceiling. Active.

Collodion.—U.S.P. stands at 19½c. per pound in drums and very firm.

Diacetone Alcohol.—Acetone-free in some quarters at 13½c. per pound in tanks; technical, tanks, 12½c.

Dibutyl Ether.—Some sellers ask 30c. per pound, minimum.

Dibutyl Phthalate.—Lowest at 20c. per pound, tanks, some quarters.

Fish Liver Oils.—Pacific Coast reports quiet market. Fishing conditions bad. Some restrictions on boats lifted by government. Stocks exhausted. No prices quoted.

San Francisco, Jan. 7.—Producers and sales agents for fish liver oils not quoting prices. Movement exceedingly narrow. Supplies scarce. Weather conditions not conducive to good sharks or dogfish fishing. Tuna catch low.

Glycerin. — Activity maintained. Close control of inventories in effect. Ceiling prices generally observed. Situation watched closely by OPA.

Chicago, Jan. 8.—Glycerin steady at ceiling levels. Demand good. Prices for both chemically pure and high gravity are:—Tankcar, 18c. per pound; drums, car lots, 18¼c.; drums, less than car lots, 18¾c.

Menthol.—Prices eased to $13.75 per pound. Recent market support by buyers not impressive. Largest users well stocked.

Methanol.—No more permitted used in anti-freeze compounds in coming Winter months, by order of Priorities Division, Office of Production Management, Amendment No. 2 to General Preference Order M-31. Order in effect prohibits use for manufacture into or, packaging as, an antifreeze agent. Prohibition applies to all stocks in hand January 1.

Molasses.—Blackstrap under curtailment order by Office of Production Management. Four classes of users set-up. Full details of control order elsewhere, this issue.

Quicksilver.—Purchases on Pacific Coast last week at $198 per flask, mines. Would be $203 per flask spot, net cost to sellers. Local sales at $208. Whatever became of the threat of a price ceiling on metal at the mines?

San Francisco, Jan. 7. — Inclement weather bringing smaller quicksilver production. If all-out production were possible, demand would still be unsatisfied. Iuquiries frequent. Sales for February delivery reported at $203 per flask, San Francisco basis. Later positions said to be slightly cheaper. Spots, practically unobtainable, nominal at $206 to $208.

Quinine.—Position very strong. Entire trend of production costs, all

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items included, definitely upward. Japanese offensive moves toward Java as troops are reported ashore in Dutch Borneo.

Silver Nitrate. — The schedule of prices since the last report prevailed as follows, covering quantities of 250 ounces; quantities of 500 ounces at ¼c. less. Comparison of prices of bullion in New York and London is also provided.

	Per ounce		
		Bullion	
	Nitrate. Cents.	New York. Cents.	London. Pence.
Saturday	26⅞	35⅛	23½
Monday	26⅞	35⅛	23½
Tuesday	26⅞	35⅛	23½
Wednesday	26⅞	35⅛	23½
Thursday	26⅞	35⅛	23½
Friday	26⅞	35⅛	23½

Resale Markets

Demands for drugs and fine chemicals in the resale market continued fairly quiet last week.

Quotations noted during the past week were:—Benzoic acid, $1.10 per pound; citric acid, 65c. to 70c.; cream of tartar, 63c.; formaldehyde, available on exchange basis, in 40-pound containers; methyl salicylate, 85c. to 90c.; Rochelle salts, 64c. to 65c.; soluble saccharin, $3.10; salicylic acid, $1.15; soda benzoate, $1.10 to $1.15; tartaric acid, 76c.; theobromine, $9.75 to $10.75; theobromine sodiosalicylate,

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Distillers Must Use Grain in Alcohol

—*Continued from page* 3

this is done, it was explained, the capacity used for ordinary distilling purposes will be diminished, at least for the time being.

The two previous orders are M-30, limiting certain less essential uses of alcohol, and M-54, which limits many essential uses of molasses, including a prohibition against the use of molasses for the production of beverage alcohol. The purpose of the three orders is to reduce the consumption of molasses from which most ethyl alcohol is manufactured. Requiring distilleries which can produce ethyl alcohol or butyl alcohol from grain to do so will relieve the molasses situation and permit increased manufacture of sugar from this source.

Most of the difficulties in sugar are caused by the war in the Pacific which cuts off United States sugar imports from the Philippines, normally 16 percent of the annual supply. Imports from Hawaii, about 14 percent of supply, also are likely to be reduced by the war. Normal sources of sugar, other than these are as follows:—Domestic beet sugar, 23 percent; domestic cane sugar, 6 percent; Puerto Rico, 12 percent; and Cuba, 29 percent.

Increased imports from Cuba are possible, OPM says, and domestic production may be stepped up. The tremendous demands for alcohol caused by the war effort, however, constitute a drain on sugar which the series of orders is designed to eliminate. Alcohol demand is up more than 300 percent over normal because of use in manufacturing explosives and plastics.

Order M-69 also provides that from time to time the Director of Priorities will order that specified deliveries of 190-proof alcohol be made, such as to smokeless powder plants, for lend-lease requirements, or to industrial alcohol plants for denaturing and storage or distribution.

Some modification of the distillery order may be possible later, depending on the outcome of legislation now before Congress. A present Federal law prohibits the manufacture of industrial alcohol and alcohol for beverage purposes in the same plant at the same time. A change in the law has been asked to permit distilleries to produce alcohol for war demands and to produce beverages after alcohol demands have been met.

The house committee on ways and means today reported favorably a bill (H.R. 6325) to amend section 2883 of the internal revenue code to permit distillers to beverage spirits, including fruit distillers, to withdraw alcohol of more than 160 degrees proof without payment of tax, subject to the same provisions of law as govern withdrawal of industrial alcohol. It also authorizes the Commissioner of Internal Revenue to permit such plants to operate on Sundays. The provisions of the legislation are to expire six months after termination of the war emergency. The bill is a compromise between earlier bills introduced by Representative Everett M. Dirksen of Illinois, and Representative Bertrand W. Gearhart of California.

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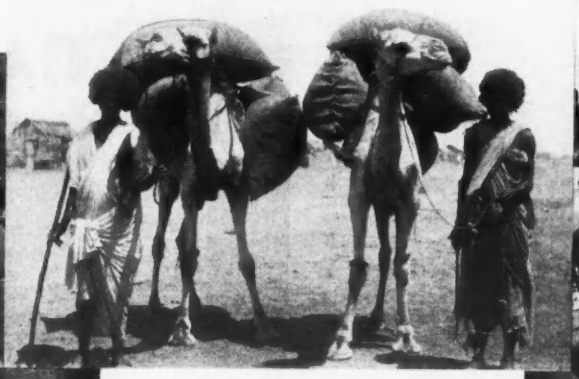

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THE WORLD'S LARGEST BOTANICAL DRUG HOUSE

Botanical Drugs, Spices, and Gums

Mace in Sensational Price Rise as Replacement Prospects Perish —Ginger Higher as Strength Expands — Sassafras and Wild Cherry Bring More Money

Although botanical drugs did not overflow the banks of the river of demand last week, they were still in good request and the undertone of the market was as stout and strong as ever.

Prices failed to develop many changes that reached the surface of events but it was safe to assume that the tendency was to ask higher quotations and hence sales at levels over recognized market limits probably were not unusual. Scarcities in stocks abounded and conditions affecting future increase in supplies certainly were not propritious.

Seasonal botanicals came in for excellent demand and, in most instances, the materials called for could be supplied out of stocks despite the fact that reserves were on the conservative side. It seemed certain that this business would continue to improve but it remained to be seen whether price advances in the recent past would be sustained.

Far Eastern merchandise remained a problem for which there seemed to be no immediate solution. Fighting war that involves the whole arena of the South Pacific Ocean has rendered future transport of merchandise uncertain, doubtful, and always frought with danger.

Balsams

Copaiba.—Active and strong under light stocks.

Fir.—Stocks more closely held. Gaining strength.

Barks

Lemon Peel.—Higher at 30c. to 32c. per pound. Stocks light.

Sassafras.—Select bark fetching upwards of 29c. to 30c. per pound repeatedly and under competition.

Wild Cherry.—Natural thin green bark selling at 8c. to 9c. in market that gains strength steadily. Demand excellent.

Beans

Calabar. — Stocks light. Demand light except for manufacturing purposes.

Vanilla. — Very strong. Growing scarce. Manufacturing consumers depending for relief on arrival of beans from Madagascar.

Berries

Hawthorn.—Scarce. Only limited quantities domestic berries available.

Saw Palmetto.—Not heard of very much for some time. Steady.

Flowers

Chamomile.—Stocks believed sufficient for all reasonable needs.

Linden.—Scarce, strong and high. No continuous replacement.

Pyrethrum.—United States totally dependent on Kenya Colony for future imports. War renders transport uncertain.

Saffron.—Little Spanish available. All closely held in strong hands.

Rue Herb

Rue herb is selling currently at $1.15 per pound when buyers are fortunate enough to locate a supply. There were eager sellers aplenty at 15c. when the war began in September, 1939.

Indigeous abroad in Southern Europe to the Orient, it is known by the graceful names of Herb-of-Grace, Ave-Grace, Herb-of-Repentance, and also by the astonishing nickname Countryman's Treacle.

In World War No. 1, prices failed to reach the present levels. In August, 1914, 8½c. per pound was considered a profitable price. By the beginning of 1915, values had risen to 40c., at which position it held steady long after the Armistice in November, 1918.

Price Changes

Advanced

Allspice, 1c. per lb.
Anise, Turkish, 2c. per lb.
star, 6c. per lb.
Coriander seed, natural, 1c. per lb.
Grindelia robusta, 1c. per lb.
Laurel leaves, 1c. per lb.
Lemon peel, 2c. per lb.
Marjoram, French, 9c. per lb.
Mace, Banda, 33c. per lb.
Batavia, 7c. per lb.
Siauw, 12c. per lb.
Nutmegs, E.I., 2c. per lb.
West Indian, 1c. per lb.
Orange peel, sweet, 2c. per lb.
Pinkroot, 10c. per lb.
Poppy seed, Dutch, 3c. per lb.
Turkish, 2c. per lb.
Sassafras bark, select, 3c. per lb.
Uva ursi leaves, 2c. per lb.
Wild cherry bark, natural, thin green, ½c. per lb.

Reduced

Celery seed, Indian, 3c. per lb.
Cumin seed, Persian, ¼c. per lb.
Cassia, China rolls, 1c. per lb.
Ginger, African, 4c. per lb.
Cochin, 3c. per lb.
Dill seed, ¼c. per lb.
Marjoram, Chilean, 1c. per lb.
Sage, Cyprus, 3c. per lb.

Comparative Values

Index numbers compiled from forty typical botanicals on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
317.8	317.8	314.7	224.4

Market news that may have developed after this report was sent to press will be found on page 4.

Gums

Arabic.—Gaining strength. Future arrivals uncertain. Recent arrivals provided some surplus supply after contract deliveries were made.

Asafetida.—Originated in India and now subject to all the danger and delay that entails with reference to future landings.

Tragacanth. — Growing stronger. Spot up to $3.40 per pound on No. 1 ribbon.

Herbs and Leaves

Grindelia Robusta. — Sold several times last week at 9c. per pound minimum.

Laurel. — Leaves from Cyprus appear on market around 52c. per pound. Portuguese item higher at 20c. to 21c.

Marjoram. — Genuine French item higher and scarce at 84c. per pound.

Imports and Detentions

Entries of botanicals at the port of New York since the week of January 1, 1942, and the detention of these items by the Food and Drug Administration because of the presence of matter rendering them unfit for human consumption were:—

	Bags Detained.	Bags Entered.
Anise	.....	.....
Belladonna (bales)	3	3
Cardamom (cases)	.....	10
Sesame	.....	650
Stramonium (bales)	370	370
Thyme (bales)	422	422

of prices beginning on page 9
Current prices on botanical drugs and spices are given in the alphabetical list

In spite of growing difficulties

Most manufacturers realize that their stake lies not alone in the immediate present—that they must look beyond today's trying conditions.

Manufacturers who continue keeping their products available in undiminished quality and with promotion that keeps their trade-marks ever in the public eye, are bound to profit in terms of uninterrupted and growing demand when the smoke settles down and things resume their normal course.

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- ✓ GINGER
- ✓ KOLA NUTS
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- ✓ PAPAIN
- ✓ RHUBARB ROOT
- ✓ SENNA LEAVES

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BELLADONNA Leaves and Root
BOLDO LEAVES
BORRAGE FLOWERS
BUCHU LEAVES
CANARY SEED, Moroccan 2%
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CLOVES, Zanzibar
COCILLANA BARK
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CUMIN SEED
DANDELION ROOT
FENNEL SEED, Indian
FOENUGREEK SEED
GENTIAN ROOT
GINGER, Jamaica
GRAINS OF PARADISE
GUM ARABIC AMBER SORTS
HELLEBORE ROOT WHITE
HERBA HERNIARIAE
HERBE MENTHE
HOREHOUND HERB
IRISH MOSS
JUNIPER BERRIES
LAUREL LEAVES
LAVENDER FLOWERS
MAHUANG, Chinese
MALEFERN ROOT
MARJORAM LEAVES
OAK MOSS
PEPPERMINT OIL
PIMENTO, Jamaica
PSYLLIUM SEED AND HUSKS
QUINCE SEED
RHUBARB ROOT
ROSEMARY LEAVES
SAGE LEAVES
SARSAPARILLA ROOT
SAVIN OIL
SAVORY
SENNA LEAVES AND PODS
SESAME SEED HULLED
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Chilean again offered firm, this time at 45c.

Sage.—Cyprus sage shaded to 77c. to 80c. per pound.

Uva Ursi. — Advanced and selling well at 20c. per pound.

Roots

Aletris.—Very firm. Country costs on new crop were not low last year.

Belladonna.—Scarce as ever. Very strong.

Cube.—Strength mounting steadily.

Derris. — Further imports from Netherlands East Indies and Philippine Islands.

Pink.—Higher at 55c. to 60c. per pound, reflecting costs in primary market.

Seeds

Anise.—Turkish up to 39c. to 40c. per pound; star jumped to 38c. to 39c. minimum.

Celery.—Indian shaded to 55c. to 56c. per pound.

Coriander.—Natural up to 13½c. to 14c. per pound. Indian, 10½c. to 11c.

Cumin.—Persian fraction lower at 17¼c. to 17¾c. per pound.

Dill.—Shaded to 9¼c. to 9¾c.

Hemp.—Manchurian advanced to 16c. to 16½c. per pound.

Poppy.—Dutch higher at 62c. to 64c. per pound; Turkish, 42c. to 43c.; Indian, 10½c. to 11c.

Spices

Allspice.—Mexican higher at 14c. to 14½c. per pound.

Cassia.—Selected Chinese rolls off to 31c. to 32c. per pound.

Ginger.—African jumped to 42c. to 43c. per pound; Cochin, 38c. to 40c.; Mace, Banda, No. 1, blown sky-high to 98c. to 99c. per pound; Batavia, 48c. to 49c.; Siauw, 68c. to 69c.

Nutmegs.—East Indian 80's higher at 32c. to 34c. per pound; 110's, 28c. to 29c.; small grinding, 24c. to 25c.; West Indian, 22c. to 23c.

Pepper.—Black Lampong shaded to 6½c. to 7c. per pound. Small berry white Muntok higher at 10c. to 10½c. No Sierra Leone chillies offered.

Trading in black pepper futures on the New York Produce Exchange from January 3 to January 9, inclusive, comprised 53 contracts. Following is a price record for the week:—

	Cents per pound		
	High.	Low.	Close.
March	6.38	6.31	6.25@ 6.35
May	6.47	6.37	6.30@ 6.38
Septembr	6.55	6.54	6.47@ 6.52

Pimento. — Fractionally higher at 22½c. to 23c. per pound.

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DCAT Appoints Sectional Dinner Leaders

Dr. Robert L. Swain, chairman of the publicity committee for the seventeenth annual Drug, Chemical and Allied Trades banquet which will be held March 12, at the Hotel Waldorf-Astoria, this city, announced that the following key men had been selected in their respective cities to organize delegations to attend the banquet:

Baltimore, George Armor, McCormick & Co.; Frank E. Black, Baltimore Drug Exchange.

Boston, F. J. Hailer, United Drug Company.

Buffalo, Hoyt Shehan, Wildroot Company.

Chicago, Ray Whidden, Bauer & Black; Clarence Morgan, Clarence Morgan, Inc.

Cincinnati, John E. Rudolph, Radio Station WLW.

Cleveland, H. A. Nelson, Chemical Supply Company.

Detroit, M. G. deNavarre, Maison G. deNavarre Associates.

Pittsburgh, J. C. Ackerman, J. C. Ackerman Company; James Freeman, H. B. Gilmore Company.

Philadelphia, Ray Anderson, Merck & Co.; L. S. Lloyd, Alex. Ferguson Company.

St. Louis, H. L. Dahm, G. S. Robbins & Co.

The American Red Cross will receive all profits of the banquet.

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Afta Solvents Corporation, this city, manufacturer of cleaning fluids for industrial use, has added to its plant the adjoining two-story building, 482-486 West 128th street.

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SO / He Saw the Astrologer

Over-fat, warty-fingered, plagued with boils and nursing a fistula, the man of 1656 got from his Astrologer-Physician

Cleavers for the Fat
Sun Dew for the Warts
Lovage for the Boils
Yarrow for the Fistula

The Astrologer-Physician believed that the planets governed his drugs. So, he gathered them when the Moon, Sun, and Venus were in the ascendant and "not in the house of their enemies."

Thus did he put the planets governing Cleavers, Sun Dew, Lovage, and Yarrow to work on the miseries of the man of 1656.

Minus the astrologer and the planets, these botanicals today find a place in American medical products

Essential Oils, Aromatic Chemicals

Search for Substitutes for Scarce Essential Oils and Aromatic Chemicals Pressed Hard—Less Ethyl Alcohol Available to Cosmetic and Perfume Makers

The first week in the new year emphasized the absence of more than moderate supplies of natural and chemical products, and it also placed strong emphasis on the importance of substitutes for the materials in low supply, hard to get, and unlikely to come to better stock position.

Demand developed along vigorous lines with the end of inventory period and the resumption of operations along a broad consuming front. Market undertones were strong in all respects and for the most part buyers were unable to purchase under the formerly influential condition of keen competition.

It has become a question of getting goods wanted, not what the goods are to cost. Notwithstanding this position that ordinarily would be highly advantageous to sellers, it must be said that the leading suppliers of essential oils and aromatic chemicals took no undue advantage of their position. Instead, they seemed to strive for reasonably stabilized prices and market conditions.

The outlook was for strong markets, limited stocks, keen activity in the development of substitutes, and the maintenance of heavy demand. Demand, however, may be tempered some by the Office of Production Management decree decreasing the supplies of alcohol available to the perfume and cosmetic industries.

Essential Oils

Almond.—Strong and tending higher. Stocks in light reserve.

Anise.—Limited stocks available. Sellers greatly reserved.

Bay.—Stronger in all markets. All advances sustained.

Birchtar.—Limited stocks reduced considerably by local sales.

Bois de Rose.—Demand sustained at levels spot stocks find difficult to meet.

Cajeput.—Outlook very dark for renewal of local supplies. Transport from Java unlikely.

Camphor.—Once stocks are exhausted no replacement is possible. Derived products likely to disappear.

Cananga.—Dubious outlook for even token arrivals of replacements from Javanese primary market. Little unsold locally.

Cassia.—The small stocks still held here are tightly held. None with a supply cares to sell. Replacement has probably ended.

Caraway.—Scattering stocks subject to advance in price on arrival each inquiry.

Cedarwood.—Stocks reported lowest in several years. Demand good.

Peppermint Oil

Something has becalmed the market for peppermint oil. Prices were recently light and buoyant, advancing steadily under high pressure in a tempestuous market.

Calm has followed the tempest. Price advances have stopped abruptly and from the Middlewest farmers has come the opinion that the advance is over and buyers may even find prices somewhat lower at an early date.

Day-to-day posting on New York prices for oil and menthol was a common request of Middlewestern oil dealers not longer than two weeks ago. And market gossip for weeks had said that diversion of peppermint oil to makers of menthol would keep prices for oil climbing toward the historical all-time high of $28 per pound.

Can it be that the interest of the Office of Price Administration in peppermint oil prices has been the effective sedative that becalmed the market? Certain it is that peppermint growers have a date with Price Administrator Henderson on January 13.

Price Changes

Advanced

Lime, distilled, $2.50 per lb. expressed, $1 per lb.

Reduced

None.

Comparative Values

Index numbers compiled from twenty typical essential oils on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
278.8	**278.8**	**274.6**	**166.3**

Market news that may have developed after this report was sent to press will be found on page 4.

Citronella.—Progress of war with Japan threatens Java primary market definitely. That in Ceylon not in much better shape.

Clove.—Demand outruns supply by substantial margin. Raw material gaining strength of substantial sort.

Coriander.—Probably near to total eclipse as to spot supply.

Dill.—Pacific Coast effort to increase production required if consumer needs be met next pickling season.

Eucalyptus.—Seasonal demand raises consumer sales. Replacement uncertain and subject to dangers of war. Situation very firm.

Juniper.—Asked for frequently, usually in vain.

Lemon.—Everything points to strong, active need during the months ahead. Total reliance on domestic goods eased a mite by the availability of oil from Uruguay.

Lemongrass.—Most of the fair-sized quantities arrived here lately were owned by consumers long prior to arrival. Not much came on the open market.

Lime.—Advanced to $10.50 to $11.50 per pound for distilled, and to $13 to $14 per pound for expressed. Scarce and sure to get scarcer.

Orange.—Firm and likely to gain strength. No definite shortage in sight but situation seems likely to tighten. Demand shows every indication of holding well. Possible reduction in sales to soft drink trade implied by the reduction of sugar quotas to beverage makers.

Palmarosa.—Not advanced further but tending upward. Replacement governs present tendencies of all description.

Pennyroyal.—Likely to show improvement. More inquiry current now. Replacement costs very firm.

Peppermint.—Some primary market advices report end of advancing prices. Suggest possible downward revisions. Peppermint farmers to meet Office of Price Administration for price conference on January 13. Ceiling under consideration.

Pimento. — Firm to steady at all points. Trade reasonably active.

Current prices on essential oils and aromatic chemicals are given in the alphabetical list of prices beginning on page 9

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Petitgrain. — No signs of market easement. Sustained inquiry finds moderate stocks here.

Sandalwood. — Believed that reasonable requirements of pharmaceutical houses can be supplied for some time. Future turns on producers' ability to keep billets moving from source to spot.

Sassafras. — Production of artificial material tends to dry up due to inability to get raw material. Natural oil to gain prominence.

Wintergreen. — Activity about normal. No surplus supply genuine, unadulterated natural product. Synthetic firm to strong.

Wormseed.—Prices tend to strengthen. Producers take stronger views on future. Local talk favors higher levels to come.

Aromatic Chemicals

Acid, Cinnamic.—Strong and very scarce. Stock increase unlikely.

Acid, Phenylacetic. — Good demand and in strong price position.

Amyl Butyrate.—Not too plentiful. Very firm.

Amyl Salicylate. — Gaining strength as supply gets tight.

Anethol. — Well maintained in strong, advancing price position.

Anisic Aldehyde. — Production curbed by break in raw material supply.

Benzyl Acetate.—Scarce and likely so to remain.

Benzyl Alcohol.—Dealers' stocks at low ebb. Strong.

Benzyl Benzoate. — Supply limited. Demand exceeds stocks.

Bromstyrol. — Selling around $3.75 per pound out of small supplies.

Carvol.—The little available brings around $22.50 per pound.

Citral.—Bringing $4.50 to $5.50 per pound when available.

Ethyl Cinnamate. — Strongly held. Supplies limited.

Ethyl Formate. — Few have anything to offer spot.

Ethyl Oenanthate. — So-called, from coconut oil, selling around $1.25 per pound in a limited way.

Ethyl Oxyhydrate. — Numerous sales at $7.50 per gallon.

Ethyl Vanillin. — Reflects fully the strong position of vanillin.

Eucalyptol. — Firm to strong along with eucalyptus oil.

Eugenol. — Numerous sales at $2.40 per pound in strong market.

Heliotropine.—Fair deliveries made spot at $4 to $4.10 per pound.

Hydroxycitronellal. — Purely nominal so far as prompt deliveries go.

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Bids Wanted

—Continued from page 4

Calcium Hypochlorite:—100,000 pounds; Depot Quartermaster, Marine Corps, 1100 S. Broad Street, Philadelphia, Pa.; schedule 1310, opening January 14.

Chloroform: — 1,950 pounds, Chemical Warfare Service, Huntsville Arsenal, Ala.; procurement 5, opening January 19.

Gum, Ester:—9,000 pounds, Supply Officer, Navy Yard, Philadelphia, Pa.; requisition 10899 NSA, opening January 13.

Naphthalene: — 20,000 pounds, Depot Quartermaster, Marine Corps, 1100 S. Broad Street, Philadelphia, Pa.; schedule 1307, opening January 14.

Nitrocellulose, Dry:—5,100 pounds; Commanding Officer, Picatinny Arsenal, N. J.; procurement 1455, opening January 13.

Oil, Lubricating, Aircraft:—700,000 gallons; Contracting Officer, Materiels Division, Air Corps, Wright Field, Dayton, Ohio; circular 1681, opening January 13.

Potassium Nitrate:—2,270 pounds; Navy Purchasing Office, 90 Church Street, New York, N. Y.; schedule 4243, opening January 12.

Shellac, Orange, Gum:—1,000 pounds; Commanding General, Frankford Arsenal, Pa.; invitation 494, opening January 15.

Sodium Hyposulphite: — 2,000 pounds; Commanding Officer, Picatinny Arsenal, N. J.; procurement 1442, opening January 13.

Strontium Nitrate, Anhyd: — 41,000 pounds; Commanding General, Frankford Arsenal, Pa.; invitation 498, opening January 15.

Wax, Paraffin:—427,500 pounds; Commanding Officer, Ogden Ordnance, Ogden, Utah; invitation 25, opening January 14.

Harrison Made Vice-President Of Ayerst, McKenna & Harrison

Ayerst, McKenna & Harrison (U.S.), Ltd., biological and pharmaceutical manufacturer, Rouses Point, N. Y., has appointed William Harrison, formerly secretary, to the office post of vice-president and managing director. W. H. Wallace will act as secretary and assistant managing director in charge of sales. W. J. McKenna assumes the chairmanship of the board. Hugh McPherson and W. A. S. Ayerst will continue to occupy as president and treasurer, respectively. Joseph Hutchinson, formerly vice-president, has resigned.

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Petroleum Products

Few New Developments in Refined Petroleum Products—Aromatic Naphthas Virtually Unobtainable—Lacquer Diluent Scarce —Gasoline Outlook Clouded by Auto Tire Shortage

There was little change in the refined petroleum markets last week. The demand for various types of solvents and diluents remained strong. Aromatic naphthas were virtually unobtainable and severe tightness was reported in lacquer diluents. Butane and propane were very scarce. Demand for other lighter fractions picked up, with both laboratory and industrial grades moving well. Offerings of paraffin wax were small. Petrolatums and white mineral oils were in good call.

Frigid weather curtailed demand for gasoline in the Northeast. Indications for 1942 are that civilian consumption of motor fuel will be much lower due to the shortage in automobile tires, which will restrict motoring. Demand for lubricating oils was well maintained. Kerosene movement was fair.

Solvents and Diluents

Aromatic Naphthas.—Supplies very short. Offerings small. Prices firm.

Cleaners Naphtha. — Movement fairly large. Prices firm.

Lacquer Diluent. — Market tight. Offerings limited. Prices unchanged.

Mineral Spirits.—Paint manufacturers ordering out material in fairly large quantities. Quotations steady.

Rubber Solvent.—Most movement to defense industries. Demand heavy. No change in price.

Stoddard Solvent.—Good interest reported. Prices firm.

V.M. & P. Naphtha.—Similar to mineral spirits, buying was on a large scale as paint makers showed keen interest in offerings. Prices steady and unrevised.

Markets at Other Centers

Chicago—Jan. 9

Demand for virtually all grades of material remained active. Sellers were not inclined to offer freely.

Aromatic Naphthas. — Supplies tight, prices strong.

Cleaners' Naphtha.—Attention good, no price change.

Lacquer Diluent.—Good interest, market unchanged.

Mineral Spirits.—Buying brisk, quotations steady.

Rubber Solvent.—Demand still good, no price change.

V. M. & P. Naphtha.—Paint industry interested, market holding.

New Orleans—Jan. 9

Quiet conditions continued to prevail in the domestic market on cleaning solvent and V. M. & P. naphtha. Prices were retained at previous levels, and the tone remained firm.

Cleaning Solvent. — Demand routine; price steady.

V. M. & P. Naphtha.—Market nominal; no change in price.

San Francisco—Jan. 9

Little of new feature to report. Prices have not changed. Offerings fair.

Aromatic Naphthas. — Demand heavy. Prices firm.

Petroleum Thinners. — Demand good. Pices steady.

Lacquer Diluent. — Production moving steadily into consumers' hands.

V. M. & P. Naphtha.—Active and firm.

Tulsa—Jan. 9

Interest in these materials was well maintained. There is considerable interest on the part of paint manufacturers.

Cleaners' Naphtha. — Heavy demand; prices strong.

V. M. & P. Naphtha.—Heavy orders; prices firm.

Mineral Spirits.—Good bidding; quotations unchanged.

Lacquer Diluent.—Market quiet; prices firm.

Rubber Solvent. — Good inquiries; prices steady.

Lighter Fractions

Butane.—Tightness continued to be the dominant characteristic of the market. Offerings were small. Prices unchanged and firm.

Heptane.—Laboratory and industrial grades continued to attract a considerable amount of buying interest. Prices were firm.

Hexane.—A steady market position was maintained, with normal movement into industrial channels. Prices unchanged.

Octanes.—Demand held to good levels. Quotations unaltered.

Pentanes.—Market conditions continued to improve as consumers ordered out slightly larger amounts of material. Tone was stable.

Propane.—Offerings were curtailed. Stocks were low. Prices firm.

Markets at Other Centers

Chicago—Jan. 9

Interest in these materials continues active for most grades, with buyers unable to secure their entire needs due to tightness.

Butane.—Call extensive, prices strong.

Heptane. — Broad demand, market firm.

Hexane. — Buying brisk, quotations steady.

Pentanes.—Call active, market unchanged.

Tulsa—Jan. 9

Tightness in light fractions is causing difficulty in the market.

Butane.—Good call; prices strong.

Propane. — Few offerings; quotations firm.

Pentane.—Heavy buying; prices unchanged.

Petrolatums and Waxes

Paraffin.—Crude scale material remained a much sought after item, but little was available. Refined grades moved well.

Petrolatums.—The market was reported in stable condition. Prices were unchanged.

White Mineral Oils. — Demand steady. Prices firm.

Markets at Other Centers

Chicago—Jan. 9

Strong demand for most products is continuing as the market feature. Sellers are not anxious to over-extend their positions.

Paraffin.—Call brisk, prices strong.

Petrolatum. — Demand steady, quotations holding.

White Mineral Oils.—Buying good, unchanged prices.

Tulsa—Jan. 9

Quietness prevails in paraffin and petrolatum markets.

Paraffin.—Trading quiet; prices firm.

Petrolatum. — Limited trading; prices strong.

Fuels and Lubricants

Gasoline. — Demand from civilian consumers tapering. Prices steady.

Kerosene.—Market quiet. Prices firm.

Lubricating Oils. — Pennsylvania grades moving well at firm prices.

Markets at Other Centers

Chicago—Jan. 9

Buying at year-end was fair. Prices were firm.

Gasoline.—Good demand, prices holding.

Lubricating Oil.—Orders brisk, market tight.

New Orleans—Jan. 9

Gasoline and kerosene moved along routine lines during the past week, quotations continuing steady and unchanged.

Gasoline.—Nominal demand; prices unchanged.

Kerosene.—Demand fair; no change in price.

Tulsa—Jan. 9

Fair orders were received throughout the Midcontinent.

Gasoline.—Less demand; prices steady.

Lubricants.—Heavy call; prices firm.

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Patent Gives No Right To Control Accessories

—Continued from page 7

patented machines only tablets which it sold.

Both companies manufacture and sell both the tablets and machines, but the Suppiger company claimed that the Morton company's machines were an infringement upon its patent. The Morton machines are not patented.

The case was appealed to the U.S. Circuit Court of Appeals for the Seventh Circuit which reversed the decision of the lower court on the grounds that there had been no showing that the Suppiger company had violated the provisions of the Clayton act, as it did not appear that the use of its patent substantially lessened competition or tended to create a monopoly in salt tablets.

The question to be decided, the Supreme Court said, is not necessarily whether the Suppiger company has violated the Clayton act, but whether a court of equity will lend its aid to protect the patent monopoly when it is being used as the effective means of restraining competition with its sale of an unpatented article.

The court said that it appears that the Suppiger company was making use of its patent monopoly to restrain competition in the marketing of unpatented articles, salt tablets, for use with the patented machines, and was aiding in the creation of a limited monopoly in the tablets not within that granted by the patent.

Where the patent is used is a means of restraining competition with the patentee's sale of an unpatented product, the court declared, the successful prosecution of an infringement suit even against one who is not a competitor in such sale is a powerful aid to the maintenance of the attempted monopoly of the unpatented article, and is thus a contributing factor in thwarting the public policy underlying the grant of the patent.

Continuing, the Supreme Court said:—

Maintenance and continuance of the attempted monopoly of the unpatented article are dependent to some extent upon persuading the public of the validity of the patent, which the infringement suit is intended to establish. Equity may rightly withhold its assistance from such a use of the patent by declining to entertain a suit for infringement, and should do so at least until it is made to appear that the improper practice has been abandoned and that the consequences of the misuse of the patent have been dissipated.

It is unnecessary to decide whether respondent has violated the Clayton act, for we conclude that in any event the maintenance of the present suit to restrain petitioner's manufacture or sale of the alleged infringing machines is contrary to public policy and that the district court rightly dismissed the complaint for want of equity.

In the second case, B. B. Chemical Company versus Magic Tape Company, the court ruled that the owner of a method patent who authorizes manufacturers to use it only with materials furnished by him was also denied the right to seek relief in an equity court. In this case, the B. B. company, a subsidiary of the United Shoe Machinery Corporation, charged the Magic Tape Company with infringement of a method process for reinforcing insoles of shoes.

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Oil Pipeline to Be Opened

OPD Washington Bureau
January 7, 1942

The Southeastern Pipeline, running 456 miles from Port St. Joe, Fla., to Atlanta, Ga., will be put into operation throughout its full length within a few days, it was announced today. The line is capable of moving 30,000 barrels of petroleum products daily.

Price Changes

Advanced

None.

Reduced

None.

Market news that may have developed after this report was sent to press will be found on page 4.

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Lubricating Oil

In an order dated January 2, 1941, the board of economic warfare of the Office of Export Control has effected a relaxation of control of materials containing high grade lubricating oils. Heretofore, material which contained any amount, no matter how small, of such lubricating oil was under strict control. Under the new schedule strict control is retained only on material containing more than 10 percent of high grade products.

Description of the materials in question is:—Crude oils or any other materials except lubricating oils, from which, by commercial distillation there can be produced, as distillate or residuum, products having a viscosity of more than sixty seconds Saybolt Universal at 210° F. with a viscosity index of over sixty, and lubricating oil from which by commercial distillation there can be produced, as distillate or residuum, 10 percent or more of products having a viscosity of more than sixty seconds Saybolt Universal at 210° F. with a viscosity index of over sixty.

Current prices on petroleum and its products are given in the alphabetical list of prices beginning on page 9

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Specializing in analysis of beverages, fertilizers, phosphates, wood pulp, coal and coke, feeding materials, etc.
Calvert and Read Streets, Baltimore, Md.

In these days of exiguous supply of heretofore necessary materials, there is a bigger-than-ever need in all kinds of enterprises for special, expert advice and assistance for the finding of materials which will carry a process or a formula from the heretofore to the now. Perhaps the finding of another process or formula is called for. That sort of thing—finding this-day materials, processes, or formulas—is what the scientific and professional services adjacently offered are to be consulted for.

U.S.P. By-Laws Revision Offered

—*Continued from page 3*

Chapter I. Article VIII. The call for the decennial meeting must be issued in January rather than in May of the preceding year because of the requirements in connection with nominations for membership on the committee of revision.

Chapter IV, Article III. The treasurer is required to furnish annual and decennial reports which must be audited.

Chapter V, Article I. Membership on the board of trustees is limited to six elected members and the president of the convention. The vice-president, the director of pharmacopoeial revision and the treasurer are ex-officio members without vote. It was not possible to work out a satisfactory arrangement for rotating membership on the board. At least two of the six elected members are required to be delegates from medical colleges or organizations and at least two from pharmaceutical colleges or organizations.

Chapter V, Article III. The board is required to issue a revision of the U.S.P., at approximately five-year intervals unless unusual circumstances prevent.

Chapter V, Article IV. The board is required to publish an annual report of the treasurer, and following the publication of each pharmacopeia, to publish a statement of the honoraria paid for revision and administrative work and the names of those to whom the moneys were paid. The board is authorized to request the resignation of a member of the committee of revision upon request of the executive committee of revision.

The board is required after receiving the advice and suggestions of the nominating committee, to elect before a decennial meeting or at any time in case of a vacancy, a director of pharmacopeial revision, preferably one who has been a member of a committee of revision and upon recommendation of the director, the board may appoint an assistant to the director.

The board is required to maintain a headquarters for the business of the U.S.P.

Chapter VI. The membership of the general committee of revision is increased to sixty-two members consisting of twenty persons qualified in medical sciences, forty persons qualified in the pharmaceutical and allied sciences, the president of the convention and the director of pharmacopeial revision. The number of subcommittees is reduced from fifteen to ten, the chairmen of which constitute with the director of pharmacopeial revision, who acts as chairman, the executive committee of revision. Vacancies in the general committee of revision shall be filled by the director with the advice and consent of the committee and of the board of trustees. Before it is released, a new U.S.P. or a supplement must be approved by the committee of revision and the board of trustees.

At least one year before a decennial meeting, the executive committee of revision shall prepare and publish an outline of specific classifications of service deemed necessary for the efficient prosecution of the work of the next revision for the guidance of those submitting names of persons to be considered for membership on the committee of revision.

Chapter VIII. The director of pharmacopeial revision is elected by the board of trustees and carries out, in general, the duties heretofore discharged by the chairman of the committee of revision.

Chapter IX. The nominating committee consists of the chairmen of the ten subcommittees, who are considered to be best informed about the work of revision, together with two medical and two pharmaceutical members of the convention to be selected by the board of trustees and who must not be members of the general or executive committee of revision or salaried employees of the convention. The committee shall be organized at least one year before the decennial meeting and at least nine months prior to the decennial meeting, shall send through its secretary, to all institutions, organizations and divisions of the Federal government entitled to representation in the convention, and to the members of the committee of revision, a request to submit the names of persons whose qualifications entitle them to consideration as nominees for membership on the committee of revision. Each name must be submitted on a special form and be accompanied by a statement indicating affiliations, academic and professional background and specific qualifications. These recommendations must be in the hands of the nominating committee by January 1 of the convention year, and shall be given primary consideration in selecting nominees. The nominating committee is required to furnish each delegate or alternate a list of names of forty persons qualified in the medical sciences and of eighty persons qualified in the pharmaceutical or allied sciences, together with a statement of their qualifications and the division or divisions of work for which each is best qualified. Nominations may be made from the floor if seconded by at least four delegates and accompanied by a written statement of qualifications. An official ballot shall be furnished at the closing session when the vote is to be taken.

This program would seem to insure the selection of the best qualified persons whether they are members of the convention or not, to constitute the committee of revision, and it should be noted that the officers of the convention and the elected members of the board of trustees are nominated from the floor of the convention.

Fertilizer Materials

Demand for Chemical Fertilizer Materials Remains Heavy—Few Orders Being Filled—Nitrate of Soda Still Under Official Supervision—Blood and Tankage Prices Advanced

There was no abatement in the demand for fertilizer raw materials during the first full week of the new year. Consumers and mixers continued to bid actively for all types of chemicals, although they knew that in most cases few of the desired products were available. Extreme tightness continued to dominate the market. The nitrate of soda situation still was under government supervision. Sulphate of ammonia was being offered only in small quantities to regular customers. Potashes were in low supply.

Movement of organics was fairly well maintained. Prices on domestic imported blood were moved upward by a surge of buying interest. The demand for tankage for feed purposes caused suppliers of that material to advance prices both at New York and Chicago. Also, the fertilizer grade was higher in the East.

Nitrogenates

Ammonia Phosphate.—Heavy demand. Little available. Prices nominal.

Anhydrous Ammonia.—Little call. Prices steady.

Castor Pomace.—Domestic material moving well. Prices steady. No imported available.

Calcium Nitrate.—None offered.

Dried Blood.—Domestic advanced 25c per unit to $5, f.o.b. New York, and $5.25, f.o.b. Chicago. Imported up 15c to $4.90 per unit, c.i.f.

Fish Scrap.—Market quiet. Prices steady and unchanged.

Nitrate of Soda.—Consumers continued to bid actively. Prices firm.

Nitrogenous Material.—Routine deliveries of domestic product. No imported material offered.

Sulphate of Ammonia.—Scarcity continued to be the outstanding characteristic of the market. Demand heavy. Prices firm.

Tankage.—Fertilizer grade advanced 25c per unit at New York to $4.25 and 10c. Feed grade advanced 25c at New York to $5 and 10c, and 15c at Chicago to $5.40 and 10c. Imported firm.

Potashes

The demand for potash salts was well maintained during the period under review. Producers, however, continued to limit offerings because of tightness of supplies. Prices were firm and unchanged.

Phosphates

Bone Materials.—Market quiet, with prices firm. Offerings limited.

Phosphate Rock.—Offerings extensive. Transportation presented main problem. Prices firm.

Superphosphate. — Heavy demand. Offerings limited. Prices firm.

Price Changes

Advanced

Blood, dried, dom., f.o.b. N. Y., 25c. per unit.
f.o.b. Chi., 25c. per unit.
imp., c.i.f. ports, 15c. per unit.
Tankage, dom., fertilizer, f.o.b. N. Y., 25c. per unit.
feed, f.o.b. N. Y., 25c. per unit.
f.o.b. Chi., 15c. per unit.

Reduced

None.

Comparative Values

Index numbers compiled from four typical fertilizer materials, on the basis of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
71.0	71.0	70.6	67.0

Market news that may have developed after this report was sent to press will be found on page 4.

Sulphur

Market position satisfactory. Demand good and shipments heavy. No limit on offerings. Prices steady.

Markets at Other Centers

Atlanta—Jan. 9

Difficulty in obtaining fertilizer materials continues to be the dominant factor in the market. Quotations on some items are nominal only.

Superphosphate.—62½c. per unit, interior producing points.

Nitrate of Soda.—Narrow, in keeping with allocations. Unchanged.

Sulphate of Ammonia.—Unchanged and inactive.

Cottonseed Meal.—8 percent grade, $42.50 to $43 ton, Southeast.

Domestic Nitrogenous.—$2.60 unit, midwestern producing points.

Blood.—So. Am., $4.75 unit, port basis.

Tankage.—Imported, $4.95 and 10c. port basis.

Baltimore—Jan. 9

Business in crude fertilizer materials is more than ever at a standstill or held down to small proportions. A sudden precipitation of severe winter weather, with temperatures close to zero, has retarded buying.

Fish Scrap.—No business is being done in the ammoniate. Meal is quoted at $75 per ton in carload lots, Baltimore.

Superphosphate. — The prices announced a week ago are still given as the market, they being $9.60 per ton for run-of-pile and $10.10 per ton for 16 percent milled and screened material, with 20 percent stocks at approximately $12 per ton.

Tankage.—Business in this ammoniate is stated to be very light, with bids of $5 and 10c. per unit-ton reported.

Dried Blood.—The last sale of this ammoniate was negotiated at $5 per unit-ton.

Bone.—Quotations are about as they have been given in recent weeks, with the volume of business very much restricted.

Sulphate of Ammonia.—Nothing has happened to change market conditions as to this product, which is still being traded at $29 per ton in the domestic market.

Chicago—Jan. 9

The general fertilizer materials market was quiet and steady at the start of the new year. Most buyers are displaying a tendency to use caution in placing orders. Offerings, however, remain limited. Blood is in good call. Tankage remains quiet, with little change. Bone materials are in a steady general market position.

Blood.—Principal grade, $5.25 per unit of ammonia.

Tankage.—High grade, $5.40 and 10c.; hoof meal, $3 to $3.10; liquid stick, $2 to $2.25.

Bone Materials. — Ground, steamed bone, 1¼ and 60 percent, $40 to $41; 3 and 50 percent, $38 to $39; 4½ and 50 percent, $39 to $40; grinding hoofs, pigs' toes and waste horn materials, $44 to $45; cattle jaws, skulls and knuckles, $40 to $42.50; pork cracklings, soft pressed, $55 to $57.50; beef cracklings, soft pressed, $52.50 to $55; hard pressed cracklings, per unit of protein, $1 to $10.5.

San Francisco—Jan. 9

All divisions of this market continued strong last week, with trade generally moderate to fair. Meat scraps were advanced $2.50 per ton and fish meal was higher by at least $3 per ton.

Sulphate of Ammonia—Not offered by first hands.

Nitrate of Soda—100-pound bags, $33 per ton; 167-pound bags, $32.40. Bulk, $30.

Superphosphate—89c. per unit in bulk, f.o.b. San Francisco.

Fish Meal—Stronger. San Francisco Bay area production, 67 percent protein, $75 per ton; Monterey, 65 percent protein, $73 per ton.

Tankage—Dry rendered, ground, 50 percent, $57.50 per ton, f.o.b. cars; 55 percent, $62.50.

Sulphur

In the year-end statement of a prominent producer of sulphur in the United States it was estimated that shipments from American companies last year were about 3,325,000 long tons, against 2,558,742 in 1940 and 2,466,512 in 1937.

The industry met in full the unprecedented requirements for defense and civilian production, according to the statement, without any substantial reduction in the above-ground stocks of mined sulphur, which total nearly 4,000,000 tons. Exports of sulphur were practically up to the level of the preceding year.

The rapid expansion during 1941 in the nation's explosives production and other industrial expansion brought about an increase in productive capacity for sulphuric acid, the form in which most sulphur is used, of more than 1,000 tons of acid per day, according to the company's statement.

Current prices on fertilizer materials are given in the alphabetical list of prices beginning on page 9

Chemical Firms Dissolved By N. Y. State in 1940

—Continued from page 7

Corp., Adams Chemists, Inc., Agricultural Insect Destruction Corp., Albans Pharmacy, Inc., Albert Chemical Corp., Algrey Drug Co., Alka-San Laboratories, Inc., Allied Cosmetics, Inc., Alvin Drug Stores, Inc., American Surgical Instrument Co., Anfort Pharmacy, Inc., Appleton, Mack, Drugs, Inc., Ardin Drug Corp., Art-Craft Dyeing Co., Art Pharmacy, Inc., Astoria Cosmetic Shop., Inc.

B. & B. Dental Laboratories, Inc., Bathgate Drug Co., Baum, The Chemist, Inc., Bess-Jay Drug Corp., Bio-Physical Therapy Products, Inc., Biolos Pharmacy, Inc., Borden's Laboratory, Inc., Bramberg Chemists, Inc., Branche, Leo, Drug Company, Inc., Breslin Pharmacy, Inc., Broadway Cosmetic Shop., Inc., Buffalo Beauty Supply Co.

C. & D. Laboratories, Inc., Cannon Laboratories, Inc., Capitol Druggists Supply Co., Challenge Chemicals Co., Chase Laboratories, Inc., Colac Chemical Co., Commonwealth Pharmacy, Inc., Condot Cosmetiques, Inc., Cooper, Peter, Pharmacy, Inc., Copley Chemists, Inc., Court Center Pharmacy, Inc., Coutant Chemists, Inc., Crystal Drug Corp., Crystosal Research Laboratories, Inc.

Davidson, J., Pharmacy, Inc., Dermolav Laboratories, Inc., Dorkay Pharmacy, Inc., Eccolex Chemical Co., Ednab Chemical Co., Elk-Horn Drug Sundries, Inc., Feldman, S., Cosmetics Co., Flomill Chemical Co., French Pancoast Laboratories, Inc.

General Chemical Coatings, Inc., Glassman, A., Pharmacy, Globe Chemical Company, Inc, Goody the Chemist, Inc., Gotham Laboratories, Inc, The Sam Grey Laboratory Co., Gusman, M., Chemist, Inc.

Hampton Chemists, Inc., Harlem Chemists, Inc., Harman Drug Company, Inc., Henco Naturopathic Products, Inc., Herald Pharmacy, Holbrook Pharmacal Co., Hornell Dental Laboratories, Inc., Hub Pharmacy, Inc., Hygrade Dye Works.

Johnson Laboratory, Inc., Kayson Drug Stores, Inc., Kane Laboratories, Inc., Kayar Chemical Corporation, Kinpik Chemicals, Inc., Kipp's Pharmacy, Inc., Kolier Drug Stores, Inc., Kosmet Laboratories, Inc., Kwik Cosmetic Corporation, Leonard Pharmacy, Inc., Leonora Pharmacy, Inc., Lockwood Chemical Co., Inc., Lord's Pharmaceutical Company, Inc., Low Chemical Company, Inc.

Mackey Medicine Co., Inc., Malvey Laboratories, Inc., Medical Centre Pharmacy, Inc., Melbore Chemists, Inc., Middletown Chemists, Inc., Modern Perfumery Co., Inc., Morcon Laboratories, Inc., Mt. Carmel Pharmacy, Inc., Neham Drug Store, Inc., New York Carbide & Acetylene Co., North Drug Co., Northern Chemical Co., Nuforal Laboratories, Inc., N. Y. Fast Color Dyers, Inc.

Oresty Pharmacy, Inc., Orren Laboratories, Inc., Pad-Lee Dental Laboratory, Inc., Paramount Chemists, Inc., Pasteur Drug Co., Patio Pharmacy, Inc., Perlane Pharmacies, Inc., Pet Chemical Company, Porter Laboratories, Inc., Proctold Laboratories, Inc., Prospect Drug Co., Publix Drug Stores, Inc., Pulp Bleaching Corp., Pyramid Pharmacal Co.

R. & L. Pharmacy, Inc., Redro Laboratories, Inc., Republic Drug, Inc., St. Luke Pharmacy, Inc., Sani-Glo Polish Co., Schwarz Drug Co., Scientific & Hospital Supply Corp., Sheinfine Drug Store, Inc., Shortwave Diathermy Laboratories, Inc., Shutts Pharmacy, Inc., Sisco Chemists, Inc., Stacom Laboratories, Inc., Standard Extract Co., Stanley Dental Supply Corp., Sunshine Chemical Co., Sunswick Laboratories, Inc., Synlac Chemical & Color Co., Syntex Chemical Corp.

Titanium Carbide Corp., Trask Chemists, Inc., Tweedy Pharmacy, Inc., Universal Laboratories, Ltd., Universal Pharmaceuticals, Inc., Vanderbilt Cosmetic Shoppe, Inc., Vanguard Chemical Co., Walton Laboratories, Inc., Wecker Laboratories, Inc., Western Chemical Co., Ltd., Fifth Avenue Chemists, Inc.

Oil and Paint Corporations

A. & P. Petroleum Products, Inc., Albany Kleen-Heet Fuel Oil Corp., Albee Oil Co., Inc., Automotive Lacquer Co., Inc., Baldwin Oil Co., Inc., Beaumont Oil Company of Texas, Inc., Boulton Oil Corporation, Buffalo Petroleum Corporation.

Cakdo Fuel Oil Co., Inc., Capitol Oil Co., Inc., Cargo Fuel Co., Inc., Cargo Oil Exports, Ltd., Cash Oil Corp., Columbus Oil Distributors, Inc., Council Petroleum Corp. Daly Paint & Varnish Corp., Don Glo Oil Corp.

Fine Glo Oil Heating Co., Flatbush Fuel Oil Delivery & Service Corp., Freeman Paint Supply, Inc., Greenaker Gas & Oil Corp., Greenbern Paint & Hardware Co., Inc., Guardian Petroleum Corp., Harbet Paint Corp, Headquarters Paint and Varnish Works, Inc., Huntington Paint Supply Store, Inc.

J. P. C. Oil & Refining Corp., Knickerbocker Oil Corp., Nelson Oil & Gas Corp., New York Independent Oil Company, N. Y. NuEnamel Co., Inc., N. Y. Paint Works, Inc., Oil Production Corp. of N. Y., Pen-Oma Oil Corp., Petroleum Oil Co., Pyramid Petroleum Corp., Red Jacket Gas & Oil Co., Roman Color Co., Inc.

Security Oil Corp., Spartan Refining Co., Tudor Fuel Oil Trucking Corp., Westchester Petroleum Co., Willow Paint & Varnish Corp.

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Barrett NITROGEN
THE BARRETT DIVISION
ALLIED CHEMICAL & DYE CORPORATION
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TEXAS GULF SULPHUR COMPANY
(INCORPORATED)
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Deposits and Plants: Newgulf and Long Point, Texas

Shipping Information

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Imports at U. S. Ports

New York Imports

ALOE—25 cs, Wessel, Duval & Co
45 tins, W R Grace & Co
100 cs
ANTIMONY ORE—4,452 bgs, Banco Minero de Bolivia
5,136 bgs, Banco Minero de Bolivia
ASBESTOS—2,844 bgs, Union Asbestos & Rubber Co
358 bgs, L J Buck
1,755 bgs, Keasbey & Mattison
510 bgs, L J Buck
764 bgs, L J Buck
2 bgs, W R Grace & Co
ASPHALT—108 bbls, Funch, Edye & Co
1 dm, Great Lakes Carbon Co
BERYLLIUM ORE—2,170 bgs, Watson Geach & Co
BISMUTH, LEAD—93 bxs, Cerro de Pasco Copper Co
REFINED—162 bxs, Cerro de Pasco Copper Co
BLOOD, DRIED—2,204 bgs, Ashcraft Wilkinson Co
BOLDO LEAVES—1 bl, A S Newburger
BONE MEAL—1,000 bgs, Consolidated Chemical Co
BONES—500 bgs, American Agricultural & Chemical Co
3,174 bgs, Armour & Co
BRISTLES—100 cs, Universal Trading Corp
50 cs, Universal Trading Corp
2 bls, Charles Sztejn
2 cs, Guaranty Trust Co
4 cs, Arnstein Importing Co
FIBER—75 bls, Volkart Bros
198 bls, Riverside Mills
66 bls, American Overseas Co
CANARY SEED — 2,240 bgs, Bunge North American Grain Co
CARDAMOM—20 cs, S B Penick & Co
CASEIN—40 bgs, Carr Bros, Inc
850 bgs, Casein Co of America
CASSIA—50 bls, B H Old & Co
100 bls, A G Dunn
80 bls, Wah Young Co
50 bls, Credo Commodities Co
84 bls, Knickerbocker Mills Co
300 bls, East Asiatic Co
100 bls, B H Old & Co
84 bls, A G Dunn
166 bls, S L Jones & Co
100 bls, A G Dunn
100 bls, S L Jones & Co
BROKEN—25 bls, Archibald & Kendall
50 bls, Knickerbocker Mills Co
100 bls, East Asiatic Co
200 bls, A G Dunn
ROLLS—30 bls, B H Old & Co
175 bls, R J Prentiss & Co
50 bls, B H Old & Co
100 bls, J S Toledano & J M Pinto
100 bls, B H Old & Co
50 bls, Wood & Selick
200 bls, McCormick & Co
100 bls, A G Dunn
150 bls, McCormick & Co
100 bls, A G Dunn
100 bls, McCormick & Co
CASTOR BEANS—212 bgs, C Williams & Associates, Ltd
107 bgs, C Williams & Associates, Ltd
1,694 bgs, Guaranty Trust Co
850 bgs, Baker Castor Oil Co
1,700 bgs, Guaranty Trust Co
1,700 bgs, Baker Castor Oil Co
1,700 bgs, Spencer Kellogg & Sons
1,700 bgs, Guaranty Trust Co
1,694 bgs, National City Bank
1,694 bgs, Guaranty Trust Co
1,696 bgs, Baker Castor Oil Co
5,100 bgs, Baker Castor Oil Co
5,100 bgs, Spencer Kellogg & Sons
1,700 bgs, Berkeshire Chemical Co
900 bgs, Guaranty Trust Co
3,400 bgs, Spencer Kellogg & Sons
5,100 bgs, Baker Castor Oil Co
6,800 bgs, Spencer Kellogg & Sons
8,500 bgs, Baker Castor Oil Co
1,694 bgs, Bunge North American Grain Co
1,694 bgs, Spencer Kellogg & Sons
3,400 bgs, Baker Castor Oil Co
3,330 bgs, Bunge North American Grain Co
1,700 bgs, Baker Castor Oil Co
1,700 bgs, Berkeshire Chemical Co
1,694 bgs, Spencer Kellogg & Sons
13,400 bgs, Baker Castor Oil Co
3,300 bgs, Bunge North American Grain Co
1,900 bgs, Baker Castor Oil Co
1,700 bgs, Berkeshire Chemical Co
1,700 bgs, Baker Castor Oil Co
CHAMOIS—10 bls, Meyer Hecht, Inc
CHILLIES — 81 bgs, Bank of London & South America
CHROME ORE—1,700 tons, Base Metal Corp
3,600 tons, E J Lavino & Co
1,005 tons, 3 cwt, 1 qtr, 16 lbs, Frank Samuels & Co
4,175 tons
CINCHONA BARK — 600 bls, New York Quinine & Chemical Works
CINNAMON QUILLS — 200 bls, American Trading Corp
150 bls, I Harrison & Whitney
46 bls, C T Wilson & Co
50 bls
COCOA BEANS—300 bgs, Machado & Co
250 bgs, W R Grace & Co
325 bgs, W R Grace & Co
700 bgs, W R Grace & Co
166 bgs, Machado & Co
100 bgs, W R Grace & Co
500 bgs
500 bgs, Antoni & Co
500 bgs
150 bgs, Daarnhouwer & Co
250 bgs
500 bgs, Curacao Trading Co
5,000 bgs, W R Grace & Co
1,000 bgs, A C Israel Commodity, Inc
1,500 bgs, Wm Bartholomew & Co
1,000 bgs, Chase National Bank
3,000 bgs, Curacao Trading Co
1,000 bgs, Bank of Manhattan
500 bgs, Chase National Bank
500 bgs, J P Morgan & Co
3,000 bgs, Wessel, Duval & Co
2,000 bgs, Nieschlag & Co
1,000 bgs, General Cocoa Co
COCONUT DESIC—400 cs
COCONUTS—124 bgs, Universal Import & Export Co
119 bgs, General Food, Ltd
116 bgs, H Schnell
COLOCYNTH—24 bls, S B Penick & Co
COLOMBO ROOT—240 bgs, R J Prentiss & Co
CONCENTRATES—17 cs, South American Development Co
COPRA—6,818 bgs, Balfour, Guthrie & Co
6,024 bgs, Balfour, Guthrie & Co
2,000 bgs
COTTON LINTERS—32 bls, Chemical National Bank Trust Co
COTTONSEED MEAL—8,800 bgs, Ashcroft-Wilkinson Co
CYANIDE PRECIP—12 cs, South American Development Co
DERRIS ROOT—Chips, 88 bgs, Ledward Bibby & Co, Inc
100 bales, Ledward Bibby & Co, Inc
DIVI DIVI—1,150 bgs, Guaranty Trust Co
2,636 bgs, J Maitland
675 bgs, Tannin Corp
2,348 bgs, Guaranty Trust Co
1,018 bgs
1,078 bgs, Selma Mercantile Corp
FISH SOUNDS—12 bales
FLAXSEED—865,632 kilos, 34,625 bu, Bunge North American Grain Co
2,488 bgs, 5,473 bu, Bunge North American Grain Co
356,616 kilos, 14,265 bu, Bunge North American Grain Co
2,502 bgs, 5,504 bu, Bunge North American Grain Co
508,000 kilos, 20,320 bu, Bunge North American Grain Co
GINGER ROOT—60 cs, R H Macy & Co
GLUE—33 bgs, T W Dunn
GLUESTOCK—51 bales, Manufacturers Trust Co
GRAPHITE—666 bgs, Charles E Pettinos
486 bgs, Asbury Graphite Mills
750 bgs, Central Hanover Bank Trust Co
250 bgs, Paterson, Boardman & Knapp
500 bgs, C E Pettinos
1,144 bgs, Asbury Graphite Mills
500 bgs, Paterson, Boardman & Knapp
500 bgs, Central Hanover Bank Trust Co
750 bgs, Paterson, Boardman & Knapp
GUM, ARABIC—250 bgs, Acad Kahabagui
250 bgs, American Cyanamid & Chemical Co
100 bgs, Jello Co
60 bgs, Pepper Product Co
250 bgs, W E Martin
150 bgs, Orbis Product Corp
50 bgs, Heywood Chemical Co
250 bgs, Herman Weber
60 bgs, Pepper Product Co
150 bgs, Abecassis & Abelson
250 bgs, Kachurin Drug Co
500 bgs, T M Duche & Sons
250 bgs, Seolan Trading Co
250 bgs, A D Isbetcherian Co
250 bgs, Kachurin Drug Co
300 bgs, Laxseed Co
250 bgs, Orbis Product Corp
250 bgs, S B Penick & Co
100 bgs, W E Martin
100 bgs, Norwick Mills
250 bgs, C M Van Sillevoldt
250 bgs, McKesson & Robbins
150 bgs, Thurston & Braidich
250 bgs, Arabal Mfg Co
500 bgs, E Meer & Co
300 bgs, Irvin Sobin Co
250 bgs, Henry Heide
250 bgs, Morteza Khosrovschahi
250 bgs, Jacques, Wolff & Co
250 bgs, Credo Commodities Co
20 bgs, W E Martin
100 bgs, D A Bondi
100 bgs, W E Martin
1,000 bgs, Wessel, Duval & Co
200 bgs, American Mercantile Oversea Co
200 bgs, Catz American Co
100 bgs, D A Bondi
200 bgs, Catz American Co
250 bgs, Wessel, Duval & Co
200 bgs, Catz American Co
500 bgs, American Cyanamid & Chemical Co
150 bgs, Max Vanpels
150 bgs, Colony Import & Export Co
170 bgs, A D Isbetcherian Co
150 bgs, Colony Import & Export Co
300 bgs, Kachurin Drug Co
100 bgs, Leo Z Mevoran
300 bgs, Kachurin Drug Co
250 bgs, American Specialty Co
250 bgs, T M Duche & Sons
150 bgs, Leo Z Mevoran
300 bgs, Raphael H Elmaleh
500 bgs, Thurston & Braidich
300 bgs, Orbis Product Corp
300 bgs, Raphael H Elmaleh
500 bgs, Henry Heide
250 bgs, Paul A Dunkel & Co
300 bgs, Raphael H Elmaleh
250 bgs, E Meer & Co
200 bgs, Thurston & Braidich
500 bgs, T M Duche & Sons
500 bgs, E Meer & Co
250 bgs, Brewer & Co
250 bgs, Royal Bank of Canada
200 bgs, McKesson & Robbins
200 bgs, Frederick Rau
100 bgs, New York & Cuba Mail S S Co
150 bgs, Thurston & Braidich
500 bgs, S B Penick & Co
150 bgs, Royal Bank of Canada
500 bgs, R J Prentiss & Co
200 bgs, Canadian Bank of Commerce
250 bgs, Kachurin Drug Co
300 bgs, Raphael H Elmaleh
50 bgs, S B Penick & Co
100 bgs, Orbis Product Corp
500 bgs, Innis, Speiden & Co
250 bgs, Thurston & Braidich
4,000 bgs, Bank of London South America
550 bgs, Thurston & Braidich
300 bgs, E Meer & Co
250 bgs, Thurston & Braidich
500 bgs, E Meer & Co
300 bgs, McKesson & Robbins
250 bgs, Thurston & Braidich
250 bgs, E Meer & Co
COPAL—140 bgs, France, Campbell & Darling
HOOFS & HORN MEAL—2,021 bgs, Armour & Co
IPECAC ROOT—16 bgs, N Brandon, Inc
14 bgs, Wessel, Duval & Co
14 pkgs, N Brandon, Inc
6 cs, N Brandon, Inc
LEAD ORE—433 tons
LEMON EXTRACT — 1 bx, Orbis Product Corp
LIME JUICE—1 crtn, J N Kelly
1 kg, C L Huisking & Co
MACE—21 cs, P H Petry & Co
MANGANESE ORE—4,000 tons
550 tons, Carnegie Illinois Steel Corp
3,000 tons, Bethlehem Steel Co, Inc
MANGLE EXTRACT—394 pkgs, Colony Import & Export Co
MEDICINAL PREPS—102 cs, Bayer Co
MICA—23 cs, Marine Export Corp
BLOCK—30 cs, Schwab Bros Corp
8 cs, Heyman & Co
10 cs, Schwab Bros Corp
100 cs, James Garman
20 cs, Schwab Bros Corp
102 cs, Ford Radio & Mica Co
100 cs, James Garman
49 cs, Mercantile Import & Export Co
CUTS—3 cs, Ford Radio & Mica Co
FILM—8 cs, Wm Brand & Co
12 cs, Schwab Bros
18 cs, Wm Brand & Co
15 cs, Schwab Bros Corp
26 cs, Ford Radio & Mica Co
SPLITTINGS—150 cs, Heyman & Co
2 cs, Wm Brand & Co
165 cs, Cornelis & Suhr
79 cs, Heyman & Co
113 cs, Heyman & Co
10 cs, A Huret & Co
600 cs, Ford Radio & Mica Co
20 cs, Ford Radio & Mica Co
200 cs, Mercantile Import & Export Co
MINERAL, CONC—222 bgs
NUTGALLS—168 bgs, Hanish, Love & Co
280 bgs, Eastman Kodak Co
252 bgs, The Arles Co
168 bgs, Taylor, White Extracting Co
NUTMEGS—100 bgs, Middleton & Co
150 bgs, Thomas Scott & Co
150 bgs, Frank Tea & Spice Co
100 bgs, Knickerbocker Mills Co
100 bgs, Thomas Scott & Co
150 bgs, Otto Gerdau & Co
50 bgs, Thomas Scott & Co
100 bgs, Middleton & Co
100 bgs, Thomas Scott & Co
100 bgs, Van Norden & Archibald
168 bgs, P H Petry & Co
150 bgs, Thomas Scott & Co
100 bgs, Knickerbocker Mills Co
50 bgs, P H Petry & Co
100 bgs, Thomas Scott & Co
50 bgs, Van Norden & Archibald
OCHER—418 bgs, Reichard-Coulston, Inc
280 bgs, T H Deutz Co
280 bgs, Mineral Pigment Corp
OIL, ANISE—10 pkgs, Geo Lueders & Co
10 dms, Geo Lueders & Co
CANANGA—2 dms, Norda Essential Oil & Chemical Co
2 pkgs, Norda Essential Oil & Chemical Co
CASSIA—10 dms, Dodge & Olcott Co
100 pkgs, Dodge & Olcott Co
CASTOR—257 dms, Murray Oil Product Co
250 dms, Wessel, Duval & Co
248 dms, Smith-Weihman Co, Inc
CINNAMON BARK—1 cs, Geo Lueders & Co
4 cs, Volkart Bros
CINNAMON LEAF—5 dms, Magnus, Mabee & Reynard
4 dms, Colgate-Palmolive-Peet Co
CITRONELLA—13 dms, Procter & Gamble Co
18 dms, Ungerer & Co
30 dms
COCONUT—992 tons, Philippine Refining Corp
49 tons, Philippine Refining Corp
FUEL—10,000 bbls, Asiatic Petroleum Corp
5,000 bbls, Asiatic Petroleum Corp
130,000 bbls, Standard Oil Co of N J
133,000 bbls, Standard Oil Co of N J
LIME DIST—9 cs, Paines & Reid
6 pkgs, Paines & Reid
LINSEED—1 tin, R Fabien & Co
NEATSFOOT—15 dms
ORANGE—9 cs, Pratt & Brake
12 cs, Fritzsche Bros
PALM—1,545 tons, Colgate-Palmolive-Peet Co
801 tons, Procter & Gamble Co
786 tons, Bank of Belge pour l'Etrange
PEANUT—70 dms, Bunge North American Grain Co
PETITGRAIN—5 dms, W R Grace & Co
50 cs
SANDALWOOD—10 cs, Magnus, Mabee & Reynard
SASSAFRAS—5 dms, S Stern Stiner & Co
SHARK—2 bbls
24 dms
VETIVER—1 dm, Roura Dupont, Inc
ORANGE PEEL—200 bgs, Struller & Wood
200 bgs
OX GALLS—14 tcs, Wilson & Co
4 tcs, Guaranty Trust Co
PAPAIN—22 cs, Merck & Co
13 cs, Norwich Pharm Co
16 half chts, S B Penick & Co
51 cs, J L Hopkins & Co
8 cs, Merck & Co
13 cs, Norwich Pharm Co
13 cs, Peek & Velsor
22 cs, R J Prentiss & Co
20 cs, C L Huisking & Co
7 cs, R J Prentiss & Co
20 cs, R J Prentiss & Co
64 cs, American Ferment Co
PEPPER, BLACK—150 bgs, W H Schwarz & Son
POTASH, NITRATE—200 bgs, New York & Cuba Mail S S Co
QUEBRACHO EXTRACT—1,066 bgs, Tannin Corp
2,000 bgs, Tannin Corp
2,928 bgs, Tannin Corp
2,000 bgs, International Product Co
4,000 bgs, International Product Co
3,873 bgs, Tannin Corp
3,877 bgs, American Tanners, Ltd
8,580 bgs, Tannin Corp
1,305 bgs, Tannin Corp
1,375 bgs, International Product Corp
6,504 bgs, Tannin Corp
3,000 bgs, International Product Corp
2,183 bgs, Tannin Corp
1,588 bgs, Tannin Corp
QUININE SULPHATE — 90 cs, Guaranty Trust Corp
167 cs, Chase National Bank
50 cs, Guaranty Trust Co
75 cs, Guaranty Trust Co
SABADELLA SEED—54 bgs, Peek & Velsor
54 bgs, J P Verdaguer
SALT—560 bgs, Middleton & Co
SAPONIN—34 cs, W R Grace & Co
SENNA LEAVES—56 bls, S B Penick & Co
11 bls
247 bls, Guaranty Trust Co
32 bls, Bank of London South America
PODS—17 bls, J L Hopkins & Co
SIFTINGS—101 bls, S B Penick & Co
27 bls, Bank of London South America
SESAME SEED—130 bgs, W G Scarlett & Co
150 bgs, East Asiatic Co
370 bgs, Credo Commodities Co
SHELLAC—200 bgs, E E Androvette
400 bgs, E E Androvette
175 bgs, E E Androvette
200 bgs, Wm Zinsser & Co
200 bgs, E E Androvette
100 bgs, Colony Import & Export Co
300 bgs, Gillespie-Rogers-Pyatt Co
400 bgs, Cornelis & Suhr
50 bgs, MacLac Co
50 cs, MacLac Co
520 bgs, A Hurst & Co
200 bgs, Ralli Bros
275 bgs, A Hurst & Co
200 bgs, Ralli Bros
300 bgs, A Hurst & Co
350 bgs, Gillespie-Rogers-Pyatt Co
300 bgs, A Hurst & Co
100 bgs, MacLac Co
200 bgs, Schwab Bros Corp
300 bgs, Carleton & Moffet
450 bgs, E E Androvette
100 cs, Schwab Bros Corp
500 bgs, Gillespie-Rogers-Pyatt Co
100 bgs, Lind Mayer & Co
600 bgs, Wm Zinsser & Co
400 bgs, Schwab Bros Corp
250 bgs, MacLac Co
BUTTON LAC—50 bgs, MacLac Co
150 bgs, Schwab Bros Corp
100 bgs, Wm Zinsser & Co
SEEDLAC—200 bgs, Cornelis & Suhr
200 bgs, Schwab Bros Corp
100 bgs, Lind Mayer & Co
200 bgs, Mac Lac Co
200 bgs, Cornelis & Suhr
200 bgs, Lind Mayer & Co
200 bgs, Dings & Schuster
300 bgs, Gillespie-Rogers-Pyatt Co
200 bgs, United Shellac Corp
200 bgs, Dings & Schuster
200 bgs, Mac Lac Co
500 bgs, Wm Zinsser & Co
200 bgs, Lind Mayer & Co
200 bgs, Wm Zinsser & Co
WAX—27 bgs, Wm Zinsser & Co
SOAP—1,000 cs, D B Bereison & Co
SPONGES—13 bls, J H Thompson
STEARIN—188 bgs
STEATITE—435 bgs, Heyman & Co
TALLOW—282 cks, H J Baker & Bro
222 tcs, Procter & Gamble Co
275 cks, H J Baker & Bro
334 cks, H J Baker & Bro
TANKAGE—1,000 bgs, Wessel, Duval & Co
2,000 bgs, Armour & Co
2,204 bgs
TANTALITE—59 bg, Philipp Bros
TARA—534 bgs, W R Grace & Co
280 bgs, Tannin Corp
600 bgs, Colony Import & Export Co
194 bgs, Tannin Corp
TARTAR—308 bgs, Martin De Botelho
148 bgs, British American & Eastern Co
TEAWASTE—1,000 bgs, Citro Chemical Co
TIN ORE—1,642 bgs, American Smelting & Refining Co
WOLFRAM ORE—500 bgs, W R Grace & Co
TOLU BALSAM—50 cs, A Martinez
WAX, BEES—12 bgs, Schutte & Focke
40 bgs, Lenape Trading Co
15 bls, General Hide & Skin Co
CARNAUBA—158 bgs, Wm M Allison & Co
56 bgs, Credo Commodities Co
CHICORY—50 bgs, Strahl & Pitsch
56 bgs, Wm M Allison & Co
WINE LEES—485 bgs, British American & Eastern Co
294 bgs, British American & Eastern Co
259 bgs, Herrick-Voight Chemical Corp
WOLFRAM, CONC—1,200 bgs, Bank of Manhattan
ORE—572 bgs, Bank of Manhattan
WOOL, FAT—40 dms

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Baltimore Imports

CHROME ORE—10,300 tons
COBALT SPEISS—2,200 tons
IRON ORE—22,000 tons, Bethlehem Steel Co
5,700 tons, Bethlehem Steel Co
MANGANESE ORE—17,100 tons
3,800 tons, Bethlehem Steel Co
ZINC CONCENTRATES—8,000 tons

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Philadelphia Imports

CORKWOOD—25,808 bls, Cork Insulation Co
CHROME ORE—12,146 tons
MANGANESE ORE—2,000 tons
MOLASSES, INVERT—600,000 gls, Pennsylvania Sugar Co
BLACKSTRAP—600,000 gls, Pennsylvania Sugar Co
PETROLEUM, CRUDE—648,793 bbls, Gulf Oil Corp

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Mutual Chemical Has Booklet On Anodizing Aluminum

The Mutual Chemical Company of America has issued a booklet on "Anodizing Aluminum by the Chromic Acid Process." The booklet also contains a reprint of a more technical treatise on the subject from the December issue of "Industrial and Engineering Chemistry." The anodic treatment of aluminum is of special interest at the present time, owing to its extensive application in the rapidly-growing aviation industry. Copies of the booklet can be obtained at the office of the company, 270 Madison avenue, New York, mentioning the REPORTER.

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Trade Leaders Views

—*Continued from page* 94

Both the company's glass and paint divisions are supplying the government with an increasing volume of products used in the manufacture of war vehicles. New paints have been developed to meet the special needs of a mechanized army. Warplanes are being equipped with bullet-resisting glasses, and optical glass production has been expanded to supply the scores of needs for this special product, which was manufactured for the armed forces during the last war in considerable volume.

In addition to providing these supplies the company's paint and chemical laboratories have directed their attention not only to development of defense materials but to the search for domestic sources of oils and other essential products that heretofore have been imported.

Means for relieving shortages of domestic materials, principally metals, also have received the attention of glass technicians. The scarcity of some metals has led to the substitution of glass. Doors, fire screens, ashtrays, signs partitions, and railings are only a few applications were glass can take the place of critical metals.

Although these represent potential markets for glass products, the glass and paint industries are faced with an actual but temporary loss of markets in the automobile and building industries, their best customers. The enforced curtailment in automobile production by at least 50 percent has narrowed a very important outlet for glass and paint products. Likewise, the forthcoming curtailment of non-defense building will restrict this important market for these products. Among other adverse factors are the rapidly rising taxes, higher prices for various raw materials, and a general increase in the cost of doing business.

Because of these highly conflicting factors it is more difficult than ever to foretell accurately the course of business over the near future. Too much depends upon such unknowns as the World War situation, and future governmental finance and war policies. But we have solved serious problems in the past and I feel confident that eventually we will emerge from the present chaos and enter a new era of peace and prosperity. Winning this war is our primary task and to this end the company and its employees are ready and willing to make extreme sacrifices.

Langbourne Williams, Jr.

President, Freeport Sulphur Company, New York

The American sulphur industry in 1941 met the challenge of the Axis by supplying American and British industry with a record-breaking total of sulphur at no advance in price, shipping three quarters of a million tons more than ever before in its history.

Under the impetus of expanding rearmament, domestic and foreign shipments during the year reached an all-time high estimated at 3,325,000 long tons. This compares with 2,558,742 tons in 1940, the previous top year, and 2,466,512 tons for 1937, the record peacetime year.

The industry not only succeeded in meeting in full the unprecedented requirements for defense and civilian production but accomplished it without any substantial reduction in above-ground stocks of mined sulphur which total nearly 4,000,000 tons, well over a year's supply for the ABCD powers at the current rate of shipments. Despite the intensification of the war, climaxed by the Axis attack on the United States, exports of sulphur were practically up to the level of the preceding year.

The remarkable record during 1941 was in pointed contrast with the situation in 1917 and 1918 during the first World War. At that time, the United States had been depending upon imports of pyrites to supply a sizeable part of sulphur needs. When these imports were disrupted by sea warfare and ship shortages, a serious sulphur crisis threatened. Domestic production fell short of minimum needs.

Today, all that has changed. Even though in 1941 we were called upon for almost triple the amount of crude sulphur supplied in the peak year of World War I, the American sulphur industry satisfactorily met all requirements. This great quantity of sulphur was supplied, moreover, at no increase above the prewar base price of $16 a ton f.o.b. mines.

Sulphur is so extensively used throughout all industry that the current expansion in sulphur consumption may be credited to a variety of individual increases. Some of these industrial developments of the year are worthy of mention.

One of the key factors in our armament program is, of course, the explosives industry, for which sulphur is an important raw material. The rapid expansion during the year in the nation's explosives production and other industrial expansion has brought about an increase in productive capacity for sulphuric acid, the form in which most sulphur is used, of more than 1,000 tons of acid per day.

In cooperation with the War Department, the acid industry effectively coordinated the production of all acid with production of military explosives and with the recovery of acid for reuse. The tremendous increase in demand for fuming sulphuric acid needed for explosives production but little used for civilian requirements was met by erecting auxiliary equipment at existing acid plants. These same plants function in the recovery and futher use of acid which has served its term in explosives manufacture.

Sulphur played an important role in expanding our output of another essential for long-term warfare—foodstuffs. In recognition of the urgencies of war, our government in 1941 adopted a policy of encouraging increased production. Of necessity, this program calls for greater use of fertilizers, insecticides, and fungicides, a necessary constituent of which is sulphur. Thus the research and promotion undertaken by the sulphur industry during recent years on agricultural uses of sulphur to prevent crop losses and increase yields are helping to further the government program.

In the petroleum refining industry, another large consumer of sulphur in the form of sulphuric acid, emphasis centered on the expansion of capacity for production of 100-octane aviation gasoline. The goal is to more than triple the present rate of 40,000 barrels daily. Twenty-five new plants are planned or under way. Three methods for producing high-octane gasoline require sulphuric acid, the alkylation process being the most important.

Production of rayon, another notable consumer of sulphur, reached a new high, increasing by about one-fifth over 1940. Rayon production was stimulated by allocation of rayon yarns to silk mills, made necessary by the silk embargo, and by substitution of rayon textiles for materials needed for the military effort A new viscose plant which will reach its top capacity of 50,000,000 pounds annually in 1942 is being built at Front Royal, Va. The viscose process, the principal consumer of sulphur among the rayon processes, accounts for about seven-tenths of all rayon production.

During the coming year sulphur requirements will be even greater than they were in 1941. Fortunately, the nation's enormous unmined reserves, large above-ground stocks and great productive capacity place us in a strong position to meet any challenge of the future.

C.P. Wilson

Manager, Products Department, California Fruit Growers Exchange, Ontario, Cal.

During 1941 our citrous products plants, namely Exchange Lemon Products Company at Corona, and the Exchange Orange Products Company at Ontario, were busy the entire year taking care of a progressively urgent demand for citric acid, oil of lemon, oil of orange, pectin, cattle feed, and orange juice and lemon juice in various forms, both natural strength and concentrated. From comments by those who look to us for supplies we believe that in all cases except regarding citric acid our customers did not look in vain; but apparently even the combined facilities of the country were not quite adequate to care for the large increase in the demand for citric acid.

With reference to 1942, the year starts out as an apparent continuation of 1941 except that at the present time at least trade across the Pacific is seriously interrupted. But the business on all of the above-mentioned products in America will apparently be reasonably good and we believe that all reasonable demands for those products will be promptly supplied by our exchange companies.

One must remember that most of the world is at war, and one thing we cannot do is prophesy anything definite more than a few days ahead. So the above is just our comment at the moment, and is not an affidavit for future certain performance.

William P. Witherow

President, National Association of Manufacturers

One primary situation will control both the total volume of 1942 business and its particular distribution—our effort to achieve maximum production of our materials.

This endeavor will mean:—

(1) Where civilian goods producers are unable to obtain critical materials, find substitutes for them, or spread a small supply, production of such civilian goods will have to be curtailed. Such curtailment will be most noted in the field of so-called "durable" consumers goods. In this field we may particularly expect curtailment in such items as automobiles, household equipment, and residential building. Many small companies will be especially hard hit, and it is to be hoped that some practical problem of aiding them can be developed.

(2) There may be proposals—even efforts—to force shifts of labor to war producers. This would likewise increase the difficulties of civilian producers. And in any event the creation of a vast military force is sure to increase the labor supply difficulties of civilian producers.

(3) We will have spotted prosperity booms in war production areas, but depression and unemployment in some other localities.

Industrial production as a whole must be expected in 1942 to expand further. The extent of any further expansion is determined by productive capacity and by the amount of available skilled labor. In order to estimate the probable 1942 increase in industrial output we may be guided by the supply of the mose essential war material, namely, steel. Steel operations during the current year continue at capacity levels. During the year the industry added perhaps 5 percent to its capacity, and over 20 percent to its production. Any immediate and extensive further increase is not feasible.

It seems safe to assume that the total volume of industrial production during 1942 will rise about 9 percent above the last half of this year, which means that industrial production for the year 1942 should average 174 on the F.R.B. index of production against an average of 156 for the current year or an overall gain from 11 percent to 12 percent.

In the following table we show the F.R.B. index of production (1935-39=100) by consecutive half-year periods together with semiannual estimates for 1942 and December, 1942. From this December to the end of next year we expect production to increase an additional 6.5 percent:—

1939—	I	100.2
	II	115.8
1940—	I	116.8
	II	128.0
1941—	I	148.0
	II	163.5
1942—	I	*171.0
	II	*178.0
December, 1941		*170.0
December, 1942		*180.0

* Estimated.

It is difficult to draw an exact line as to what is war work and what is not, but it is roughly estimated that at present a maximum of 30 percent of industrial production is absorbed by the war production program. This is expected to increase before 1942 is over to 50 percent of the total national production. This substantial increase will be brought about by the over-all increase in production and by a decline of production in consumers goods. It is estimated that the value of civilian business transactions during 1942 will equal those of 1941, but that the volume will recede in about the same proportion as further price increases, which means to an extent of about 15 percent, unless there can be some really effective price control which does not now seem likely. This retrenchment of normal business activity will be principally brought about by a sharp decline in consumers' durable goods and there may also be some lowering of consumers' perishable goods.

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Alcohols Restricted In Production and Use

—*Continued from page* 3

Other ethyl esters.
Resins and plastics.
Acetaldehyde.
Ethyl ether.
Health supplies (as defined in preference rating order P-29 as amended to September 30, 1941).
Ethers, glycol and other [sic] ethylene dibromide.
Xanthates.
Fulminate of mercury.
Ethylene gas and ethylene oxide.
Dyes and intermediates.
Nitrocellulose (dehydration).

(4) Unless otherwise directed by the Director of Priorities, no person shall, during any month commencing with the month of January, 1942, use (distribute in the case of a distributor) or accept delivery of ethyl alcohol for any purpose referred to, either specifically or otherwise, in subparagraphs (c) (1) and (2) hereof in excess of that percentage, specified in subparagraphs (c) (1) and (2) hereof with respect to such purpose, of the quantity of ethyl alcohol which he used (distributed in the case of a distributor) or delivery of which he accepted for such purpose during the corresponding month in the twelve months' period ended June 30, 1941. The restrictions in this subparagraph (c) (4) contained shall not apply to the use, or acceptance of delivery, of ethyl alcohol for the purposes set forth in subparagraph (c) (3) hereof. No producer or distributor shall deliver any ethyl alcohol to any person unless prior to such delivery, the deliveree shall certify to the deliverer that such delivery will not, taking into consideration deliveries made and to be made to him during such months from all sources, be in violation of the provisions of this subparagraph.

Production Restricted

(d) Restrictions on production of ethyl and butyl alcohol. Except as may be otherwise directed by the Director of Priorities, no producer shall, after January 15, 1942, produce ethyl or butyl alcohol from molasses (as defined in general preference order No. M-54) unless his equipment and facilities capable of producing ethyl or butyl alcohol from corn or grain are being utilized to the fullest extent possible in the production of ethyl or butyl alcohol from corn or grain.

General preference order M-54, with reference to molasses, puts no restriction on its use for distilling. It restricts purchases for other uses to the following amounts in addition to a fifteen day's supply on hand:—

For manufacture of yeast, citric acid, edible molasses, or insecticides or for dust extraction—thirty-day supply in any calendar month.

For manufacture of feed (other than for the barrel trade)—Twenty-two-and-one-half-day supply in January, 1942; fifteen-day supply in any succeeding month.

For foundry purposes—Forty-four-day supply in any month.

For manufacture of vinegar—Twenty-five-and-one-half-day supply in January, 1942; twenty-one-day supply in any succeeding month.

Isopropyl Alcohol

Deliveries of isopropyl alcohol are subjected to the restrictions of paragraph (c) above. In addition, certain specific manufacturing uses of this alcohol are given preference ratings as follows:—

Acetone	B-1
Chemicals, chemical products and chemical processing	B-3
Drugs and pharmaceuticals	B-5
Anti-freeze	B-7

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C.P. Sohn Named President Of Standard Pharmaceutical

Charles P. Sohn has been elected president of the Standard Pharmaceutical Corporation, pharmaceutical manufacturer, Baltimore. Mr. Sohn, who formerly was vice-president of the company, succeeds John J McGinity, who died recently.

Business Wants and Offers

Minimum rate (up to 36 words), without display, $2.00 per insertion; 25c for each additional 6 words
Payable in advance at 59 John Street, New York

Agencies Wanted

NEW YORK JOBBING and importing firm established over twenty years is interested in securing new connections for the sale of raw materials, by-products or chemical specialties. BOX 525, Oil, Paint and Drug Reporter.

NEW YORK IMPORTERS and agents interested in new contacts and sources of supply of raw materials from all parts of the world. Present sources effected by war in Far East. BOX 550, Oil, Paint and Drug Reporter.

Capital Offered

WILL INVEST in small going pharmaceutical manufacturing business. Have excellent connections with chain drug stores and jobbers. BOX 537, Oil, Paint and Drug Reporter.

Containers Offered

FOR SALE—We offer subject to inspection and being unsold 2,000, or any quantity thereof, 50-gallon, 6-hoop, oak barrels; last contained turpentine. Price and terms upon application. BOX 540, Oil, Paint and Drug Reporter.

Equipment Offered

ROLLER MILLS, 5 rolls, 16x40 and 20x 40. Have five National equipment "Springfield" mills for sale. Perfect condition. BOX 511, Oil, Paint and Drug Reporter.

FOR SALE:—Two 6x8 ft. pebble mills. 16x40 roller mills, 12x30 roller mills, 9x24 roller mills, 15 to 40-gallon pony mixers, lead mixers. Sell us your surplus equipment. Irving Barcan Company, 30 Church street, New York City.

FOR SALE—One Day 12 in. by 32 in. 5 roller mill, motor driven; pony mixers, 8 to 80 gals.; three Kent 8 in. lab. stone mills; three Ross 26 in. stone mills with iron mill feeds; pebble mills, lab. to 700 gals.; Day jumbo jacketed mixers, 700 to 1,250 gals.; thirty filter presses, 12 in. to 36 in.; powder mixers, 100 to 2,000 lbs.; one W. & P. 50-gal. vacuum mixer; W. & P. mixers, lab. to 200 gals.; copper and aluminum kettles, 10 to 250 gals.; dryers; Sweetland filters, etc. Send for complete bulletins. Brill Equipment Corporation, 183 Varick street, New York City.

FOR SALE—Day mixer with reduction gear; size approximately 65 in. long, 26 in. wide, 28 in. deep; in perfect condition, with or without motor; lupomatic tumbling barrel, never used. BOX 529, Oil, Paint and Drug Reporter.

FOR SALE—Sharples super centrifuge with clarifier type bowl complete with motor; two 40-gallon Wearever aluminum steam-jacketed kettles with stands; guaranteed good condition. BOX 535, Oil, Paint and Drug Reporter.

FOR SALE—12 in. x 32 in. 3-roll Day paint or ink mill, water cooled; perfect condition; silent chain drive; reasonable for immediate delivery. S. Shuster, 300 Race street, Philadelphia, Pa. Lom. 7434.

FIND what you want right in New York City. Pony mixers, post mixers, Day sifter-mixers, portable mixers, revolvators, jacketed kettles, tanks, three-roller mills, dough mixers. Storms-Harvey Equipment Company, 123 Bleecker street. SPring 7-8955.

FOR SALE—214 H.P. H.W.T. boiler, price $3,500. P. S. Kramer, Tar Refiner, 7 Smith street, Paterson, N. J.

SPECIAL EQUIPMENT — Stokes tablet machine, single punch, 1½ in. diameter; three 150-gallon stainless steel tanks, aluminum covers, one with agitator; Sharples super centrifuge, totally enclosed type; Karl Kiefer 12-stem rotary vacuum filler; Inconel atmospheric drum dryer, 20 in. x 17 in.; steam jacketed drying cabinet, 29 in. x 30 in. x 72 in.; 200-gallon Pfaudler jacketed glass-lined kettle; jar and pebble mills; portable agitators; steel storage tanks to 15,000-gallon capacity. Your surplus is needed for defense. Send us your lists. Machinery & Equipment Corporation, 59 E. Fourth street, New York City.

Equipment Offered

FOR SALE—No. 2 mikro-pulverizer; two 20 H.P. Kane gas boilers; 60 in. dia. x 48 in. closed steel agitated kettle; Buffalo double effect evaporator; Spencer turbo blower, 450 c.f.m., 24 oz.; two 200-gal. closed copper tanks. Lawler Company, Metuchen, N. J.

Equipment Wanted

WANTED—Our expansion program requires additional equipment. We need iron and wood filter presses, jacketed kettles, mixer, pulverizer, dryer, etc. No dealers. Send your offerings to BOX 526, Oil, Paint and Drug Reporter.

WOULD BE interested in small pebble mills of at least 100-gallon capacity; positively no dealers. Write F. Scheurer, 622 Willow avenue, Hoboken, N. J.

WANTED — 1,000-gallon glass-lined or stainless steel tank with or without jacket. BOX 546, Oil, Paint and Drug Reporter.

WANTED—100-gal. to 250-gal. jacketed steel kettle. BOX 547, Oil, Paint and Drug Reporter.

WANTED—Large pony mixer, 40-gal. or better. BOX 548, Oil, Paint and Drug Reporter.

Factories Offered

BRICK FACTORY—Two-story and basement, 50x100; high-pressure boiler; windows on four sides; elevator; yard 50x 100. Unrestricted district in Brooklyn; near subway. The R. L. Kraft Company, Woolworth Building. COrtlandt 7-9377.

Materials Offered

WE OFFER the following chemical products, made in Mexico, in quantities:—Cacodylic acid and cacodylates, activated carbon. all qualities; lecithin ex ovo, 95 percent; ichthammol, syn.; papain. bromelin, vitamin D cryst.; catgut. crude; santonin; atropine, etc. BOX 522, Oil, Paint and Drug Reporter.

LUMINOUS CALCIUM pigment for manufacturing superior luminous paint for black-out illumination. Better than twelve-hour afterglow. No grinding required. Used extensively in England. Reasonably priced. Sole manufacturers American Luminous Products Co., Huntington Park, California.

CHLORINATED PARAFFIN (medicinal grade) in original sealed containers to be sold as technical grade f.o.b. New York. Atlantic Chemical Supply, 395 Broadway, New York, N. Y. WOrth 4-6849.

CALCIUM CHLORIDE, anhydrous, manufactured by new process. Excellent for gas drying, laboratory desiccating, food preserving, etc. Furnished in all sizes—lump, mesh and powder. For prices and samples write Crucible Chemical Works, 230 Prospect street, Brooklyn, N. Y

FOR SALE — Approximately 200 lbs. aluminum aceto tartrate, 50 lbs. urea monobrome tannate, 1,500 grams anthrasol. Make offer. BOX 544, Oil, Paint and Drug Reporter.

Materials Wanted

WILL PURCHASE your surplus and discontinued lots of chemicals, oils, waxes, dyes, intermediates, dry colors, greases, metals and other raw materials and by-products. Also entire plants. Consult inventory and plant superintendent. Barclay Chemical Co., Inc., 75 Varick street, New York. Telephone WAlker 5-4250.

WE ARE in the market for all industrial and pharmaceutical chemicals paying cash New York. We take care shipment. Wire quantities available and price directly to Casa Molina Font, Reforma 27 E-F., Mexico, D. F.

CHEMICALS, SOLVENTS and allied products, both surplus and discontinued lots as well as damaged lots, bought at premium prices. BOX 533, Oil, Paint and Drug Reporter.

Plants Offered

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SALESMAN experienced chemicals, solvents. Without impairment present connections, opportunity afforded earning lucrative commissions, as merchandise scouts. All is necessary you obtain full particulars of concerns liquidating, or others having distressed lots merchandise. Where deals are consumated on leads furnished we pay lucratively. BOX 536, Oil, Paint and Drug Reporter.

CHEMIST WANTED for industrial manufacturing chemical company familiar with government specification formulation applicable to metal industry; cleaners, polishes, etc. BOX 539, Oil, Paint and Drug Reporter.

FACTORY FOREMAN wanted; thoroughly experienced in crushing castor seed. Give details regarding past experience, connections, etc. BOX 541, Oil, Paint and Drug Reporter.

PRODUCTION MAN capable taking charge of medium size paint and varnish plant in the East. Must have well-rounded background and understand fully operation of all types of mills from actual experience. Must be able to efficiently schedule manufacture to obtain maximum production. Give full details, stating age, draft status, education, remuneration and full experience. Our employees know of this ad. BOX 542, Oil, Paint and Drug Repoter.

CHEMIST—Paint and varnish; must be thoroughly familiar all Federal specifications. This is a good opportunity for a capable man. Location Philadelphia. Give full details for interview. BOX 545, Oil, Paint and Drug Reporter.

Positions Wanted

INTERESTED IN permanent connections. Domestic and foreign buying and selling chemicals, drugs, pharmaceuticals, metals, minerals, raw materials. Surplus bought for cash. Allied Raw Materials Corporation, 50 Broad street, New York. HAnover 2-9134.

VEGETABLE OIL specialist; 18 years' experience in production of resined, bleached, hydrogenated, deodorized oils and associated products. Also fatty acid distillation and crude glycerine production. BOX 531, Oil, Paint and Drug Reporter.

Positions Wanted

POSITION WANTED—Factory or sales; fifteen years superintendent or chemist manufacturing a full line paints and varnishes; graduate chemist; two years selling industrial paints; fourteen years selling pigments to factories and jobbers; good live following New Jersey, Philadelphia and New York. BOX 532, Oil, Paint and Drug Reporter.

WAX EXPERT, in position, wants change; specializes in liquid no-rubbing paste waxes, polishes, etc. BOX 534, Oil, Paint and Drug Reporter.

OFFICE ASSISTANT, female. Had experience with import firm. Can handle correspondence and assist in bookkeeping. Prefers position in small office. BOX 538, Oil, Paint and Drug Reporter.

SALESMAN, EXECUTIVE type, with thorough experience in pharmaceuticals, biologicals and fine chemicals, wishes position with first-class firm. Highest type references. Draft exempt. BOX 549, Oil, Paint and Drug Reporter.

Services Offered

CHEMIST and chemical engineers—if you are now unemployed send your complete chronological record of education and experience to Chemist Advisory Council, Room 811, 60 East 42d street, New York City.

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CHECK INVENTORIES! We purchase any quantity surplus chemicals, colors, pigments, oils, waxes, drugs, pharmaceuticals, and all basic raw materials, as well as by-products, residues and wastes of all kinds. Entire plants bought. Eastern Color & Chemical Co., 143 Nassau street, New York City. COrtlandt 7-7441.

Holiday Mementoes Received

O.P.D. acknowledges with sincere appreciation to its friends the receipt of their holiday greetings and expressions of good-will. Among the mementos received were:—

Gregorian Christmas blessing and a fifteenth century wassail—"Bring us in good ale"—on a decorated folder, from James Gray, Inc., New York.

Christmas greeting with the picture of a King Solomon and the ironworker, from the Cochrane Corporation, Philadelphia.

Birchbark folder, brightly illuminated, with Christmas and New Year wishes, from the Williaim D. Neuberg Company, New York.

Christmassy card expressing good-will and friendship, from the Rogers-Horgan Trading Corporation, New York.

Wall calendar of twelve large leaves, each showing three months and a picture of a coal products' application, from the Koppers Company, Pittsburgh.

Synthesized Noel minstrels on a card of season's greetings, from the Nuodex Products Company, Elizabeth, N. J.

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Index to Advertisements

Acme Steel Drum Co. 96
Advance Solvents & Chemical Corp. —
Alabama Charcoal Co. 100
Alexander, Jerome 122
Alkydol Laboratories, Inc. —
Allied Asphalt & Mineral Corp. —
American Agricultural Chemical Co. —
American British Chem. Supplies, Inc. 98
American Can Co. 104
American Cyanamid & Chemical Corp. —
American Firstoline Corp. 82
American Flange & Mfg. Co. 19
American Potash & Chemical Corp. —
Anderson-Prichard Oil Corp. —
Ansbacher-Siegle Corp. 85
Apex Chemical Co., Inc. —
Applied Chemical Corp. 103
Association of Consulting Chemists and Chemical Engineers, Inc. 122
Atlantic Coast Fisheries Co. 114
Atlantic Refining Co. —
Atlas Electric Devices Co. 88
Atlas Powder Co. 114

Baker Castor Oil Co 67
Baker, J. T., Chemical Co. 1, 112
Barber Asphalt Co. —
Barium & Chemicals, Inc. 98
Barium Reduction Corp. 97
Barrett Division 100, 123
Bayonne Company, Inc. 76
Bemis Bro. Bag Co. 22
Benzol Products Co. —
Berk, F. W., & Co., Inc. 74
Binney & Smith Co. —
Brighton Copper Works —
Brode Corp., The 110
Bromund, E. A., Co. 111
Bureau of Chemistry 122
Burke, Edw. S. —
Bush Pan-America, Ltd. 119
Bush, W. J., & Co., Inc. 119

Calco Chemical Division 105, 118
Calif. Fruit Growers Exchange 120
Capital City Products Co. 110
Carbide & Carbon Chemicals Corp. —
Carey, The Philip, Co. —
Chase, W. S., Drier & Chemicals, Inc. 70
Chemical Sales Corp. 102
Chemical Solvents, C. P., Inc. 128
Chew, John A. 79
Church & Dwight Co. 97
Coastwise Petroleum Co. 102
Coleman & Bell Co. —
Colgate-Palmolive-Peet Co. 115
Colledge, E. W., General Sales Agent. —
Colton, Arthur, Co. —
Columbia Chemical Division 15
Commercial Solvents Corp. —
Consolidated Products Co., Inc. 126
Consumers Import Co., Inc. 113
Continental Can Co. 25
Coupe, Robert A. 97
Cowles Detergent Co. 91
Crown Can Co. —

Darling & Co. 121
Davison Chemical Corp. 95
Day Chemical Co. 122
Delta Chemical & Iron Co. 128
Desert Chemical Company —
Diamond Alkali Co. 91
Dickhart, W. H. 122
Dodge & Olcott Co. 74
Doggett, Stanley, Inc. —
Dorward & Sons Co. —
Douglass Sulphur Co. —
Dow Chemical Co. 17
Dunkel, Paul A., & Co., Inc. 111
DuPont de Nemours, E. I., & Co., Inc. 1
Durez Plastics & Chemicals, Inc. —

Eastman Kodak Co. 115
Eisingh & Lugtigheid 110
Ehrlich, J. 122
Ellis-Foster Co. 122
Emery Industries, Inc. 109
Enequist Chemical Co. 98

Faesy & Besthoff, Inc. 55
Fairmount Chemical Co. 54
Falk & Co. 78
Fallek Products Co. 114
Felton Chemical Co., Inc. —
Fezandie & Sperrie 72
First Machinery Corp. 64
Food Research Laboratories, Inc. 122
Frank-Vliet Co., Inc. 89, 114
Franks Chemical Products Co. 87
Freeport Sulphur Co. —
Fritzsche Bros., Inc. 51, 98, 120
Fulton Bag & Cotton Mills —
Furth, Louis, Inc. 106

Gartenberg, H., & Co. 103
General Drug Co. 21
General Electric Co. —
Gesell, R., Inc. 120
Gillespie-Rogers-Pyatt Co., Inc. 71
Givaudan-Delawanna, Inc. 107
Glidden Co. 58
Golwynne Chemical Co. 26
Gray, William S., & Co. 1, 39
Gray Industrial Laboratories 122
Greef, R. W., & Co., Inc. 48, 111
Griffin Chemical Co. —
Gross, A., & Co. 41, 109
Gruman, J. B., Co. —

Hallowell, Horace J. 122
Hardesty, W. C., Co., Inc. 109
Harshaw Chemical Co. 108
Heekin Can Co. 110
Heyden Chemical Corp. —
Hoffman-La Roche Co. 33
Holt, C. J., Co., Inc. 122
Hooker Electrochemical Co. 23
Hopkins, J. L., & Co. 117
House of Wallace 119
Huisking, Chas. L., & Co. 53
Hutchinson, D. W., & Co., Inc. 119

Imperial Oil & Gas Products Co. 80
Imperial Paper & Color Corp. —
Independent Mfg. Co. 110
Industrial Chemical Sales Div. 81
Industrial Consulting Labs., Inc. 122

Inland Alkaloid Co. 49
Innis, Speiden & Co. —
International Minerals & Chemicals Corp. 59
International Pulp Co. —
International Selling Corp. 98
Irvington Smelting & Refining Works. —

Jackle, Frank R. —
Jones & Laughlin Steel Corp. 102
Jungmann & Co., Inc. 98

Kachurin Drug Co. 117
Kelco Co. —
Kellogg, Spencer, & Sons 63
Kentucky Color & Chemical Co. 106
Kenya Pyrethrum 65
Kessler Chemical Co., Inc. 113
Keto Chemical Co. —
Khosrovschahi, Morteza 118
Knight, B. H. 122
Koppers Company 101
Krebs Pigment & Color Corp. —
Krumbhaar Chemicals, Inc. 82

Laning, E. M., Co. 122
LaWall & Harrisson 122
Leghorn Trading Co. 114
Lemke, B. L., Fine & Rare Chemicals. 73
Leonhard, Theodor, Wax Co., Inc. —
Lewistown Corporation Laboratories. 34
Lueders, George, & Co. —

Magnetic Pigment Co. —
Magnus, Mabee & Reynard, Inc. 47, 119
Mallinckrodt Chemical Works. —
Mann, F. J., Inc. 115
Mantrose Corp. 62
Marine Magnesium Products Corp. —
Marx, Segre Co., Inc. 90
Mathieson Alkali Works, Inc. —
McKesson & Robbins, Inc. —
Menhaden Fish Products Co. —
Mercantile Import & Export Co. 114
Merck & Co., Inc. 8, 37
Metasap Chemical Co. —
Meyer, Herman, Drug Co., Inc. —
Michigan Alkali Co. 12
Millmaster Chemical Co. 128
Mills, Zophar, Inc. 106
Minnesota Specialty Co. —
Molnar Laboratories 122
Monsanto Chemical Co. 11
Munch, James C. 122
Mutual Chemical Co. of America 103

National Aniline Division —
National Box & Lumber Co. 128
National Can Corp. —
National Lead Co. —
National Milk Sugar Co. 114
National Rosin Oil & Size Co. —
Natural Products Refining Co. 90, 99
Neuberg Chemical Corp. 83, 111
Neville Co. 106
Newark Steel Drum Co. —
New Jersey Zinc Co. 29
N. Y. Quinine & Chemical Works, Inc. 6
Nicet Chemicals Corp. 103, 114
Niagara Alkali Corp. 24
Niagara Chlorine Products Corp. —

Oil States Petroleum Co., Inc. 121
Oldbury Electro-Chemical Co. —
Orbis Products Corp. 78
Orthmann Laboratories, Inc. 122
Osborn, C. J., Co. 106

Pacific Alkali Co. —
Pacific Coast Borax Co. 1
Pacific Vegetable Oil Corp. —
Paramet Chemical Corp. 105
Parsons, M. W. 114
Peck & Velsor, Inc. 118
Penick, S. B., & Co. 45, 116
Pennsylvania Coal Products Corp. —
Pennsylvania Industrial Chem. Corp. —
Pennsylvania Refining Corp. —
Pennsylvania Salt Mfg. Co. —
Petroleum Specialties Co. 84
Pfaltz & Bauer, Inc. 114
Pfizer, Chas., & Co., Inc. 31
Philadelphia Quartz Co. —
Philipp Brothers, Inc. 107
Pittsburgh Plate Glass Co. 15
Polachek, Z. H. 122
Potash Co. of America —
Prentiss, R. J., & Co. 118
Prescott Paint Co. 76
Prior Chemical Corp. 1
Procter & Gamble 109, 114
Publicker Commercial Alcohol Co. —
Purdy, W. S., Co., Inc. 122
Pure Calcium Products Div. —
Purocaine Chemical Co. 72

Raisch, John E., & Co. 114
Reed-Blair Laboratories 114
Reichhold Chemicals, Inc. —
Reinhold Publishing Corp. 92
Republic Steel Corp. —
Rheem Mfg. Co. —
Robert & Co. 61
Robinson-Wagner Co. 120
Rosenthal, H. H., Co., Inc. 57, 128
Rufert Chemical Co. 23

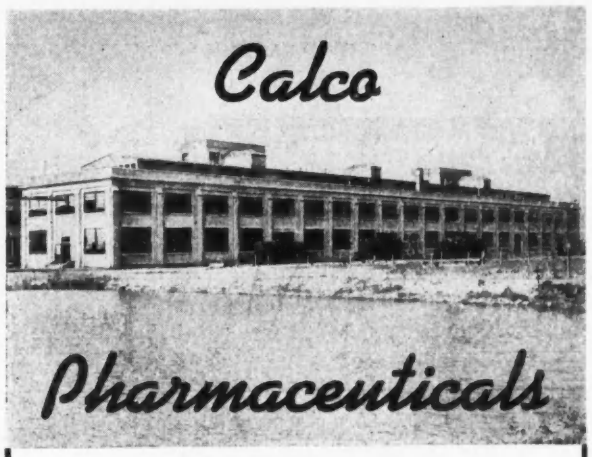
Sadtler, Samuel P., Son, Inc. 122
St. Joseph Lead Co. 85
Schuylkill Chemical Co. 128
Schwarz Laboratories, Inc. 122
Sell, Putt & Rusby, Inc. 122
Seydel Chemical Co. —
Sharples Chemicals, Inc. 1
Shell Oil Co. 77
Sherwood Refining Co., Inc. 121
Silzle, E. A., Corp. 119
Skelly Oil Co. —
Smead & Small, Inc. 68
Smith, George F. 86
Smith, Kline & French Labs. —
Snell, Foster D., Inc. 122
Socony-Vacuum Oil Co., Inc. —
Solvay Sales Corp. 27
Solvents Recovery Service —
Sonneborn, L., Sons, Inc. 128
Southern Acid & Sulphur Co., Inc. —
Sparkler Mfg. Co. 90
Standard Alcohol Co. —
Standard Brands, Inc. 90
Standard Oil Co. of Calif. —
Standard Oil Co. of N. J. —
Standard Specialty & Tube Co. —
Standard Synthetics, Inc. 84
Standard Ultramarine Co. —
Starkie, Albert E. 88
Stauffer Chemical Co. 98
Stillman & Van Sicien, Inc. 122
Stillwell & Gladding 122
Stroock & Wittenberg Corp. 16
Sun Oil Co. —
Synthetic Products Co. —

Taintor Trading Co., Inc. —
Tamms Silica Co., Inc. —
Tar & Chemical Div. of Koppers Co. 101
Tar Residuals, Ltd. 102
Tennessee Corp. —
Texas Gulf Sulphur Co., Inc. 75, 128
Thompson-Hayward Chemical Co. 98
Thornton, The F. C., Co. —
Thurston & Braidich 128
Titanium Pigment Corp. —
Todd, A. M., Co. —
Tombarel Products Corp. —
Truesdail Laboratories, Inc. 122
Turner, Joseph, & Co. 97
Tuteur Co. 80
Union Carbide & Carbon Corp. —
United Carbon Co. 66
U. S. Industrial Chemicals, Inc. —
United States Potash Co. —
Universal Trading Corp. —

Vanderbilt, R. T., & Co., Inc. 93
Velsicol Corporation 28
Victor Chemical Works 98
Viking Distributing Co. —
Virginia-Carolina Chemical Corp. 98
Vitro Mfg. Co. 106
Vol-U-Meter Co. —

Wah Chang Trading Corp. 110
Warner Chemical Co. 2
Warwick Chemical Co. 107
Weil, Rene 98
Weiss & Downs, Inc. 122
Wet Ground Mica Assn., Inc. 107
White Tar Co. of N. J. 101
Wiley & Co., Inc. 122
Will & Baumer Candle Co., Inc. —
Williams, C. K., & Co. —
Wilson & Bennett Mfg. Co. 57
Wilson Carbon Co. 86
Wilson-Martin Division 110
Wishnick-Tumpeer, Inc. 13
Woburn Degreasing Co. of N. J. 43
Wolf, Jacques & Co. 118
Wood Preserving Corp. 101
Wood Ridge Division 74
Young, J. S. 54

Zink & Triest Co. —
Zinsser & Co., Inc. 98
Zophar Mills, Inc. 106



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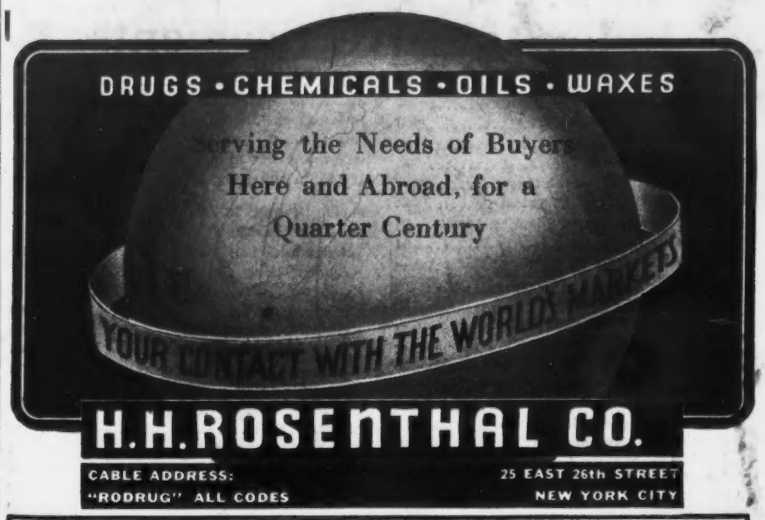
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